MK5 Messages

Error Message

%MK5-1-BADRING: msgtxt_badringsize

Explanation An internal software error occurred.

Recommended Action If either of these messages recur, call your technical support representative for assistance.

Error Message

```
%MK5-1-INITFAIL: msgtxt_initfail
```

Explanation The hardware failed to initialize correctly.

Recommended Action Repair or replace the controller.

Error Message

```
MK5-1-INITNOPPRIM: Unit %d, initialization failure - No CSR1_PPRIM_INIT_CONF, csr1 = 0x\$04x
```

Explanation The hardware failed to initialize correctly.

Recommended Action Repair or replace the controller.

Error Message

```
%MK5-1-INITUERR: Unit %d, initialization CSR1_UERR failure, csr1=0x%04x
```

Explanation The hardware failed to initialize correctly.

Recommended Action Repair or replace the controller.

Error Message

```
%MK5-1-MEMERR: msgtxt_memoryerror
```

Explanation A network serial interface detected a hardware problem.

Recommended Action Repair or replace the controller.

Error Message

```
%MK5-1-NOMEMORY: msgtxt_nomemory
```

Explanation The requested operation could not be accomplished because of a low memory condition.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

%MK5-3-OUTENCAP: Unit %d, bad output packet encapsulation: 0x%x

Explanation An internal software error occurred.

Recommended Action If either of these messages recur, call your technical support representative for assistance.

Error Message

%MK5-3-PLOSTERR: Unit %d, provider primitive lost, csr0=0x%04x, csr1=0x%04x

Explanation A network serial interface detected a hardware problem.

Recommended Action Repair or replace the controller.

Error Message

%MK5-3-PPRIMERR: Unit %d, unexpected provider primitive, csr0=0x%04x, csr1=0x%04x

Explanation A network serial interface detected a hardware problem.

Recommended Action Repair or replace the controller.

Error Message

%MK5-3-SPURPPRIMERR: Unit %d, spurious provider primitive interrupt, csr0=0x%04x, csr1=0x%04x

Explanation A network serial interface detected a hardware problem.

Recommended Action Repair or replace the controller.

Error Message

%MK5-3-UPRIMERR: Unit %d, user primitive error, csr0=0x%04x, csr1=0x%04x

Explanation A network serial interface detected a hardware problem.

Recommended Action Repair or replace the controller.

Error Message

%MK5-5-LINEFLAP: Unit %d excessive modem control changes

Explanation Too many modem control interrupts have been received. The port was disabled to prevent excessive use of the CPU.

Recommended Action Check the cable on the serial port.

MKA Messages

Error Message

 $MKA-3-CAK_DERIVE_FAILURE: Unable to derive CAK for Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s$

Explanation Connectivity Association Key (CAK) derivation failed (internal failure).

Recommended Action No action recommended (internal failure).

Error Message

%MKA-3-CKN_DERIVE_FAILURE: Unable to derive CKN for Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s

Explanation Connectivity Association Key Name (CKN) derivation failed (internal failure).

Recommended Action No action recommended (internal failure).

Error Message

%MKA-3-CREATE_HANDLE_MAP_FAIL: %s, Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s, CKN %s

Explanation MKA Session failed to properly store some CKN related information.

Recommended Action No action required (internal error).

Error Message

%MKA-3-ICK_DERIVE_FAILURE: Unable to derive ICK for Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s

Explanation Integrity Check Value Key (ICK) derivation failed (internal failure).

Recommended Action No action recommended (internal failure).

Error Message

%MKA-3-INTERNAL_ERR: %s, Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s, CKN %s

Explanation MKA Session failed to come up because of an internal error.

Recommended Action No action required (internal error).

%MKA-3-INVALID_MACSEC_CAPABILITY: Terminating MKA Session because no peers had the required MACsec Capability %s, Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s, CKN %s

Explanation MKA Session was terminated because no peers in the CA had a high enough MACsec Capability value set in MKPDUs received to use SAKs distributed by this Key Server. The required minimum MACsec Capability is dictated by the configured MACsec options.

Recommended Action Check the MACsec Capability of the peers' hardware or lower the requirements for MACsec Capability by changing the MACsec configuration for this interface.

Error Message

%MKA-3-INVALID_PARAM_SET: %s, Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s

Explanation MKA Session failed to process an unknown Parameter Set of a received MKPDU.

Recommended Action No action required (internal error).

Error Message

%MKA-3-KEK_DERIVE_FAILURE: Unable to derive KEK for Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s

Explanation Key Encrypting Key (KEK) derivation failed (internal failure).

Recommended Action No action recommended (internal failure).

Error Message

 $MKA-3-MKPDU_VALIDATE_FAILURE: MKPDU validation failed for Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s, CKN %s$

Explanation MKPDU failed one or more of the following validation checks: - Valid MAC Address and EAPOL Header, - Valid CKN and Algorithm Agility, - ICV verification, - Correct order existence of MKA payloads, - MI verification if peers exist, - MN verification if peers exist.

Recommended Action No action recommended (internal failure).

Error Message

%MKA-3-NULL_BASIC_PARAM_SET: %s, Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s

Explanation MKA Session failed to process the Basic Parameter Set of a received MKPDU.

Recommended Action No action required (internal error).

%MKA-3-NULL_CA: %s

Explanation MKA Session failed to come up because of an internal error.

Recommended Action No action required (internal error).

Error Message

%MKA-3-NULL_CAK_OR_CKN: %s, Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s

Explanation MKA Session failed to initialize because of a zero CAK or CKN.

Recommended Action No action required (internal error).

Error Message

%MKA-3-NULL_DISTR_SAK_PARAM_SET: %s, Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s

Explanation MKA Session failed to process the Distributed SAK Parameter Set of a received MKPDU.

Recommended Action No action required (internal error).

Error Message

%MKA-3-NULL_PEER_LIST_PARAM_SET: %s, Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s

Explanation MKA Session failed to process the Live or Potential Peer List Parameter Set of a received MKPDU.

Recommended Action No action required (internal error).

Error Message

%MKA-3-NULL_SAK_USE_PARAM_SET: %s, Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s

Explanation MKA Session failed to process the SAK Use Parameter Set of a received MKPDU.

Recommended Action No action required (internal error).

Error Message

%MKA-3-NULL_VP_OR_SESSION: %s, Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s, CKN %s

Explanation MKA Session failed to come up because of an internal error.

Recommended Action No action required (internal error).

%MKA-3-SAK_GENERATE_FAILURE: Unable to generate SAK for Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s, CKN %s

Explanation Secure Association Key (SAK) generation failed.

Recommended Action No action recommended (internal failure).

Error Message

%MKA-4-KEEPALIVE_TIMEOUT: Keepalive Timeout for Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s, CKN %s

Explanation For a Pairwise CA (i.e. one peer), MKA has not received a MKPDU from its Live Peer for more than 6 seconds, so the MKA Session will be terminated. If this is a Group CA (i.e. multilple peers), MKA has not received a MKPDU from one of its peers for more than 6 seconds, so the Live Peer will be removed from the Live Peers List.

Recommended Action Check connection to peer, otherwise no other action recommended (internal failure).

Error Message

%MKA-4-SAK_TRANSMIT: Not all peers have indicated they are receiving after 6 seconds - continuing to install new transmit SA, Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s, CKN %s

Explanation For a Pairwise CA (i.e. one peer), MKA acting as the Key Server has distributed a SAK for use in MACsec to a peer with the minimum required MACsec Capability, but has not received a SAK-Use payload back from the peer indicating that the peer is receiving using the newly distributed SAK withing 6 seconds (MKA Life Time), so MKA will go ahead and install the new Transmit SA and begin to transmit using the new SAK in MACsec. If this is a Group CA (i.e. multiple peers), MKA acting as the Key Server has distributed a SAK for use in MACsec to all peers but has not revceived a SAK-Use payload back from all peers indicating that each peer is receiving using the newly distributed SAK withing 6 seconds (MKA Life Time), so MKA will also install the new Transmit SA and begin to transmit using the new SAK in MACsec immediately.

Recommended Action Check connection to peers MKA/MACsec implementation on the peers' systems, otherwise no other action recommended.

Error Message

%MKA-5-SAK_REKEY: MKA Session is rekeying the SAK for Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s, CKN %s.

Explanation MKA Session is rekeying its SAK.

Recommended Action No action required (normal operation).

%MKA-5-SAK_REKEY_SUCCESS: MKA Session successfully rekeyed the SAK for Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s, CKN %s.

Explanation MKA Session has successfully rekeyed its SAK.

Recommended Action No action required (normal operation).

Error Message

%MKA-5-SESSION_REAUTH: MKA Session is re-authenticating for Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s.

Explanation MKA Session is re-authenticating in which a new CAK will be derived, a new SAK is generated/installed/distributed, and there is a seamless switchover from the old CAK/SAK to the new CAK/SAK. This re-authentication was triggered external to MKA (e.g. 802.1x Re-Authentication).

Recommended Action No action required (normal operation).

Error Message

%MKA-5-SESSION_SECURED: MKA Session was secured for Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s, CKN %s

Explanation MKA was able to secure the session with the peer (normal operation).

Recommended Action No action required (normal operation).

Error Message

 $MKA-5-SESSION_START:$ MKA Session started for Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s

Explanation MKA Session started initialization and setup (normal operation).

Recommended Action No action required (normal operation).

Error Message

%MKA-5-SESSION_STOP: MKA Session stopped for Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s, CKN %s

Explanation MKA Session was terminated due to normal operation, user intervention, or timeout/failure).

Recommended Action No action recommended.

%MKA-5-SESSION_UNSECURED: MKA Session was not secured for Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s, CKN %s

Explanation MKA session was unable to be secured (due to no MACsec support, invalid MACsec configuration, or other MKA failure on local or peer side) prior to the establishment of a Secure Channel (SC) and installation of Secure Associations (SA) in MACsec. MKA reports back that it was unable to secure the session so that the session can either reauthenticate or be hosted unsecured.

Recommended Action If MKA Session should have been secured, check MACsec support/configuration connectivity.

Error Message

%MKA-7-SESSION_REAUTH_SUCCESS: MKA Session re-authenticated successfully for Local-TxSCI %s, Peer-RxSCI %s, Audit-SessionID %s, CKN %s

Explanation MKA Session was able to re-authenticate successfully and has seamlessly switched to a new CAK/SAK (normal operation).

Recommended Action No action required (normal operation).

MLD_PROT Messages

Error Message

%MLD_PROT-3-PAK_ERR: An internal error occured while processing a packet queue

Explanation A managed queue event has been received without a packet.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MLD_PROT-3-SHUTDOWN_ERR: Error in [chars] : [chars]
```

Explanation An internal error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%MLD_PROT-3-STARTUP_ERR: Unable to start to MLD process

Explanation An internal error has occurred.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at

http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%MLD_PROT-6-IDB_ENABLE: Interface [chars] does not support multicast, not enabled

Explanation Either IGMP or MLD has not been enabled because the interface does not support multicasting.

Recommended Action No action is required.

Error Message

 $MLI-3-NOT_ENOUGH_SPACE:$ There is not enough space in Memory Layout Information area to store the tuple

Explanation There is an internal software error where Memory Layout Information (MLI) area has not enough space reserved to store the given MLI tuple data.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach outputs from the show mli and show tech commands.

MLOAD Messages

Error Message

%MLOAD-3-APIAWOL: URL [chars] doesn't export [chars]. Module disabled.

Explanation The loaded module's namespace does not include a required name.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MLOAD-3-BADIMAGE: URL [chars], size [dec]([hex]) fails module image sanity tests

Explanation The module image is severely damaged and is not executable.

Recommended Action Obtain or provision a usable module, and try again.

Error Message

MLOAD-3-BADVERSION: URL [chars] major version [dec] mismatch with IOS version [dec].

Explanation The loaded module's version number does not match.

Recommended Action Obtain the correct version of the indicated module.

Error Message

%MLOAD-3-MALLOCFAIL: Couldn't allocate [dec] bytes in [chars]

Explanation The module loader could not allocate memory.

Recommended Action Reboot the router. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%MLOAD-3-READERROR: Error reading URL [chars]

Explanation The module loader encountered a read error.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MLOAD-3-TOOBIG: Error reading URL [chars], size exceeds [dec]([hex])
```

Explanation The module is too big.

Recommended Action Obtain or provision a usable module, and try again.

Error Message

```
%MLOAD-3-TOOSMALL: Error reading URL [chars], size [dec]([hex])
```

Explanation The module is too small.

Recommended Action Obtain or provision a usable module, and try again.

Error Message

```
%MLOAD-5-URLNOTFND: Couldn't open URL [chars]
```

Explanation The module loader could not open the indicated file.

Recommended Action Obtain or provision a usable module and try again.

Error Message

```
%MLP_HAL-3-NULL_DATA_STRUCTURE: Data structure [chars] found Null
```

Explanation Data structure was found NULL.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MLP_HAL-4-MODE_CHANGE_TO_HW: Multilink interface [chars] Changed to hardware mode

Explanation MLPPP operation on this interface will now happen on the PA hardware.

Recommended Action No action is required.

Error Message

%MLP_HAL-4-MODE_CHANGE_TO_SW: Multilink interface [chars] Changed to software mode

Explanation The configuration on the interface to operate in hardware is unsupported. MLPPP operation on this interface will now happen in the IOS.

Recommended Action Verify and correct your Multilink configuration for this interface if this needs to operate in the hardware mode.

Error Message

 $MLP_HAL-4-QOVERFLOW:$ Multilink interface [chars] Delayed event handling queue overflow

Explanation QUEUE for handling the configuration over flowed.

Recommended Action Try reconfiguring the failed configuration.

MLRIB Messages

Error Message

%MLRIB-4-MLRIB_CLIENT1_ROUTE_REPOPULATION_TIME_EXCEEDED: A routing database client id [dec] failed to complete route repopulation: Layer [dec] sub address family [dec] and routing client instances [dec]

Explanation Routing database client did not complete route repopulation within the allotted amount of time after a system failover.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

representative and provide the representative with the gathered information: show mlrib layer2 log event all, show mlrib layer2 log error all, show mlrib layer2 log trace all, show mlrib common log event all, show mlrib common log error all and show logging.

Error Message

%MLRIB-4-MLRIB_CLIENT2_ROUTE_REPOPULATION_TIME_EXCEEDED: A routing database client id [dec] failed to complete route repopulation: Layer [dec] sub address family [dec] and routing client instances [dec]

Explanation The routing database client did not complete route repopulation within the allotted amount of time after a system failover.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information: show.mlrib.layer2.log event all, show mlrib layer2 log error all, show mlrib layer2 log trace all, show mlrib common log event all, show mlrib common log error all and show logging.

Error Message

%MLRIB-4-MLRIB_CLIENT3_ROUTE_REPOPULATION_TIME_EXCEEDED: A routing database client id [dec] failed to complete route repopulation: Layer [dec] sub address family [dec] and routing client instances [dec]

Explanation Routing database client did not complete route repopulation within the allotted amount of time after a system failover.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information: show.mlrib.layer2.log event all, show mlrib layer2 log error all, show mlrib layer2 log trace all, show mlrib common log event all, show mlrib common log error all and show logging.

%MLRIB-4-MLRIB_CLIENT4_ROUTE_REPOPULATION_TIME_EXCEEDED: A routing database client id [dec] failed to complete route repopulation: Layer [dec] sub address family [dec] and routing client instances [dec]

Explanation Routing database client did not complete route repopulation within the allotted amount of time after a system failover.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information: show.mlrib.layer2.log event all, show mlrib layer2 log error all, show mlrib layer2 log trace all, show mlrib common log event all, show mlrib common log error all and show logging.

Error Message

%MLRIB-3-MLRIB_L2_ERROR_DELETING_TOPOLOGY: Error deleting routing topology scope [dec] information from routing database

Explanation This condition occurs when the information about a routing topology scope in the routing database gets corrupted and does not fully match with the expected information of the routing topology to be deleted.

Recommended Action Consider reconfiguring the routing topology scope. If the error persists reload the router.

Error Message

%MLRIB-3-MLRIB_L2_ERROR_DELETING_VPN: Error deleting private network [dec] information from routing database

Explanation This occurs when the information about a private network in the routing database gets corrupted and does not fully match with the expected information of the private network to be deleted.

Recommended Action Consider reconfiguring the private network. If the error persists reload the router.

Error Message

 $MLRIB-6-MLRIB_L2_PREEMPTIVE_PRIV_NETWORK_NOTIFICATION:$ A notification was sent preemptively for the private network [dec] and client id [dec]

Explanation This condition occurs when the client experiences a large number of notifications.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying

information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information: show mlrib layer2 log event all, show mlrib layer2 log error all, show mlrib layer2 log trace all, show mlrib common log event all, show mlrib common log error all and show logging.

Error Message

%MLRIB-6-MLRIB_REDUNDANCY_PREEMPTIVE_NOTIFICATION: A notification was sent preemptively for the private network [dec]and client id [atalk_address]fter redundancy switchover

Explanation This condition occurs when the client experiences a large number of notifications.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information: show.mlrib.layer2.log event all, show mlrib layer2 log error all, show mlrib layer2 log trace all, show mlrib common log event all, show mlrib common log error all and show logging.

Error Message

%MLRIB-4-MLRIB_ROUTE_REPOPULATION_TIME_EXCEEDED: All routing database client failed to complete route repopulation

Explanation None of the routing database client completed route repopulation within the allotted amount of time after a system failover.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information: show.mlrib.layer2.log event all, show mlrib layer2 log error all, show mlrib layer2 log trace all, show mlrib common log event all, show mlrib common log error all and show logging.

%MLRIB-4-SYSTEM_ROUTE_HIGHWATER_MARK_REACHED: Route system [dec] has reached its high water mark of [dec]

Explanation The number of routes installed in a routing database has exceeded a threshold. This condition indicates a high density of routes within this system.

Recommended Action Consider balancing some destinations using additional routing devices.

Error Message

%MLRIB-4-SYSTEM_ROUTE_LIMIT_REACHED: Routing system [dec] has reached its maximum route capacity of [dec]

Explanation The number of routes installed in a routing system has exceeded a preset limit. This condition indicates a high density of routes within this system. No more routes can be installed within this system until the number goes below high water mark of 95% of preset limit

Recommended Action Consider balancing some destinations using additional routing devices.

Error Message

%MLRIB-4-TOPOLOGY_ROUTE_HIGHWATER_MARK_REACHED: Route topology scope [dec] has reached its high water mark of [dec]

Explanation The number of routes installed in a routing topology scope has exceeded a threshold. This condition indicates a high density of routes within this routing topology scope.

Recommended Action Consider routing some destination via other route topology scopes.

MLSCEF Messages

Error Message

%MLSCEF-2-EXCESSIVE_FIB_CORR_SSRAM_ERRORS: Too many fib correctable ecc error interrupts.

Explanation Number of correctable error interrupts exceeded threshold of 1000 correctable EC.

Recommended Action Collect the outputs of the **show mls cef hardware**, **show mls cef log** and **show ver** commands. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

%MLSCEF-2-EXCESSIVE_FIB_SSRAM_ERRORS: Too many fib uncorrectable ecc error interrupts.

Explanation Number of uncorrectable error interrupts exceeded threshold, bringing down the system.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MLSCEF-2-FIB_SSRAM_WRITE_INCONSISTENCY: FIB SSRAM Mismatch for Index: %ld Expected: %8lx, Hardware: %8lx

Explanation Possible problem in writing FIB SSRAM

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MLSCEF-2-FIB_TCAM_WRITE_INCONSISTENCY: FIB TCAM Mismatch for [chars]: Index: [dec] Expected: Entry: [hex]-[hex]-[hex] Hardware: Entry: [hex]-[hex]-[hex]
```

Explanation Possible problem in writing to the specified FIB TCAM entry. The specific entry could be bad.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Collect the outputs of the **show mls cef hardware**, **show mls cef log** and **show ver** commands. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

%MLSCEF-2-FREEZE: hardware switching disabled on card

Explanation A corrupted MLS CEF has been frozen for examination.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MLSCEF-2-HARDWARE_LIMIT_REACHED: The number of CEF entries have far exceeded the supported hardware FIB capacity. Freezing the hardware FIB or reloading the system.

Explanation The number of route entries that are installed has far exceeded the supported hardware FIB capacity. No more free index available for CEF entry. Freezing hardware FIB if **mls cef error action freeze** is present in the configuration, otherwise reloading the system.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

Error Message

%MLSCEF-2-INSERT_FAILURE: proto: [dec], ptr: [hex]

Explanation A programming error has been detected in the hardware FIB.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

```
%MLSCEF-2-INTERRUPT: proto: [dec]
```

Explanation An attempt to program the hardware FIB at interrupt has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MLSCEF-2-PREFIX_FAILURE: [IP_address]/[IP_address] (index: [hex], proto: [dec],
ptr: [hex])
```

Explanation A programming error in the hardware FIB has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MLSCEF-2-RELOAD: maximum routes config mismatch. Reloading with correct config

Explanation System has detected mismatch of user-configuration route allocation and current route allocation. Reload is required to correct this.

Recommended Action If this message appears continuously on the same line card, and the mls cef maximum-routes command has not been entered, contact the TAC with show tech output. Otherwise, no action is required.

%MLSCEF-2-SANITY_FAIL: Sanity Check of MLS FIB s/w structures failed

Explanation Inconsistent MLS FIB s/w data structures.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MLSCEF-2-UNCORRECTABLE_SSRAM_ERROR: Bank %d Index: %ld, Expected: 0x%x, Hardware: %x. Affected TCAM %02x-%08x-%08x

Explanation Bad FIB SSRAM location.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MLSCEF-4-FIB_EXCEPTION: FIB TCAM exception for IPv4 unicast. Packets through some routes will be software switched. Use 'mls cef maximum-routes' to modify the FIB TCAM partition.

Explanation Either the number of route entries that are installed has exceeded the hardware capacity, or the protocol that generated an exception condition does not have enough route entries reserved. As a result of this condition, some prefixes will be software switched.

Recommended Action Enter the **mls cef maximum-routes** command, with 'protocol' being the MLS CEF protocol used, to increase the maximum number of the routes for the protocol.

%MLSCEF-4-FIB_EXCEPTION_THRESHOLD: Hardware CEF entry usage is at 95% capacity for [chars] protocol.

Explanation The number of route entries that are installed is about to reach the hardware FIB capacity, or the maximum routes limit set for the specified protocol. If the limit is reached, some prefixes will be software switched.

Recommended Action Enter the mls cef maximum-routes global configuration command to increase the maximum number of routes for the protocol. Refer to the configuration manuals for the differing capacity limitations of XL vs non-XL systems, as well as for impacts to other protocols when changing maximum-routes of one protocol. Enter **show mls cef summary** to see the current usage summary.

Error Message

%MLSCEF-7-END_FIB_EXCEPTION: FIB TCAM exception cleared, all CEF entries will be hardware switched

Explanation The FIB TCAM free blocks are now available. All CEF entries will be hardware-switched.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MLSCEF-7-FIB_EXCEPTION: FIB TCAM exception, Some entries will be software switched

Explanation The FIB TCAM free blocks do not exist.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

 $MLSCEF-7-FIB_MASK_MISMATCH:$ Attempt to delete an entry not matching block mask - class = %d, %d/%d, mask %d/%d

Explanation The passed mask is not matching with the stored block mask.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MLSCEF-7-SHADOW_INCONSISTENCY: FIB TCAM Mismatch for [chars]: Index: [dec] Expected: Entry: [hex]-[hex]-[hex] Hardware: Entry: [hex]-[hex]
```

Explanation The hardware FIB is inconsistent with the shadow FIB.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MLSCEF-7-SHADOW_SSRAM_INCONSISTENCY: FIB SSRAM Mismatch for Index: [dec] Expected: [hex], Hardware: [hex]
```

Explanation The hardware FIB SSRAM is inconsistent with the shadow FIB SSRAM.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

```
%MLSCEF-7-WRITE_INCONSISTENCY: FIB TCAM Mismatch for [chars]: Index: [dec]
Exprected:Entry: [hex]-[hex]
Hardware: Entry: [hex]-[hex]
```

Explanation An error may have occurred in writing to the FIB TCAM.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

MLSM Messages

The following are Multicast Distributed Shortcut Switching (MDSS)/multi-layer switching for multicast (MLSM) messages.

Error Message

```
%MLSM-2-IPC_ERROR: MMLS: IPC failure detected between RP and SP
```

Explanation An IPC failure has occurred. This condition is caused by an EOBC channel or an NMP that is too busy, so that the Multilayer Switching Feature Card side does not get a response even after a few retries by the IPC layer.

Recommended Action Under some conditions of stress, when communication between the RP and the SP side cannot be maintained, this message is displayed. MMLS keeps trying to recover from situation by sending a message to the SP. The restart message to the SP has an exponential backoff time with a maximum of 160 seconds.

Error Message

%MLSM-6-CONFIG_MISMATCH: Multicast hardware switching config mis-match between RP and NMP.It is likely to be disabled on the NMP

Explanation MLS multicast hardware switching has been enabled on the RP but has likely been disabled on the NMP.

Recommended Action Correct the misconfiguration by enabling IGMP Snooping and MMLS on the NMP.

%MLSM-6-CONFIG_MISMATCH_RECOVERED: Multicast hardware switching mismatch recovered from earlier config mis-match

Explanation An MMLS configuration mismatch between the RP and SP has occurred previously, and the system has recovered from the mismatch condition. The MLS multicast hardware switching should now be enabled on the NMP.

Recommended Action Note the difference between the time the error occurred and the time of this message. It indicates the time when no hardware-switched entries existed in the switch.

Error Message

%MLSM-6-ERROR_RECOVERED: MMLS: Communication channel between RP and SP recovered from failure

Explanation Communication between RP and SP has recovered from an earlier IPC or Switch-Module Configuration Protocol (SCP) failure. MMLS will install the hardware-switched entries after the backoff timer expires. The backoff time is calculated by the following formula: min(10 sec * (# of times error occurred)^2, 160).

Recommended Action Note the difference between the time when the error occurred and the time when this message was received. It indicates the period of time during which no hardware-switched entries existed in the switch.

Error Message

%MLSM-6-LC_SCP_FAILURE: NMP encountered internal communication failure for ([IP_address],[IP_address],[dec]), flow will be software switched

Explanation The SP was not able to update the CEF tables on at least one of the EARLs on the line cards. The SP was not able to communicate with the line card to update the multicast-CEF table, causing inconsistency in the CEF table among the different line cards.

Recommended Action The shortcut is deleted, so the inconsistent state is purged. The flow specified in the error message will get software-forwarded.

Error Message

%MLSM-6-MFD_COUNT_ERR: MFD Count error : ([IP_address],[IP_address],[dec]) first mfd: [dec]vlan extra RPF-MFD in HW state: [dec]vlan

Explanation There are multiple MFDs in the hardware-switched state.

Recommended Action This condition can occur when the system is under heavy load and the RP determines that there are two MFDs installed for a particular flow. This is a harmless error; this message is for debugging purposes only.

%MLSM-6-MIN_MTU_SUPPORTED: MMLS flows being re-started as the MTU of all the interfaces (oifs) is not equal. Packets greater than the minimum MTU of all oifs will be software switched

Explanation All the EARLs in the system have Polaris Revision 1.1. In this system configuration, the EARL bridges the packet in the incoming interface to the MSFC if the incoming packet size is larger than the MTU programmed in the FIB. Software forwards the packet out in all the interfaces. In this configuration, WAN (incoming) to LAN (outgoing) flows can be hardware-switched up to a minimum MTU of OIF sizes.

Recommended Action This is an informational message only. If too many packets are going to the CPU, the MTU on the interfaces should be changed appropriately to take advantage of hardware replication.

Error Message

%MLSM-6-MIN_MTU_UNSUPPORTED: Outgoing interfaces with MTU less than the RPF interface will be multicast replicated to in software

Explanation At least one EARL in the system now has Polaris Revision 1.0. In this system configuration, the EARL cannot bridge the packet in the incoming interface to the MSFC if the incoming packet size is larger than the MTU programmed in the FIB. Outgoing interfaces having an MTU less than the MTU of the IIF become completely software-forwarded. In this configuration, WAN (incoming) to LAN (outgoing) flows are completely software-forwarded.

Recommended Action This is an informational message only. If too many packets are going to the CPU, the MTU on the interfaces should be changed appropriately to take advantage of hardware replication.

Error Message

%MLSM-6-MLSM_PMS: MMLS : MLSM is suspending the caller process %s

Explanation This message is to remind the user that MLSM is suspending the caller process. This happens when the MLSM routines are called from PIM/Mwheel context and MLSM routines does an process suspend

Recommended Action When MLSM suspends the caller process there is a possibility of data corruption for the data handled by the caller process

Error Message

%MLSM-6-MMLS_EGRESS_INFO: MMLS : Please make sure no multicast traffic is going through egress incapable line cards when system is operating in egress mode

Explanation This message is to remind the user that there should be no multicast traffic going through egress incapable line cards while the system is operating in egress replication mode.

Recommended Action Check to see if there are any egress incapable line cards in the system. If there are egress incapable line cards, make sure that there is no multicast traffic going through these cards.

%MLSM-6-MMLS_LEGACY_INSERTED: MMLS : Legacy Linecard Inserted, Egress Replication Mode will be disabled

Explanation Egress Replication is not supported with Legacy Cards, system will transition to Ingress Mode, please note that the transition will cause temporary loss of traffic

Recommended Action If the system is required to operate in Egress Replication Mode the Legacy lineard should be removed.

Error Message

```
%MLSM-6-MMLS_MODE_CHANGE: MMLS : Replication Mode Changed to %s mode (%s)
```

Explanation When auto detection of replication mode is enabled the system will transition to ingress mode when an egress incapable linecard is inserted. The system will transition back to egress mode when the last egress incapable linecard is removed

Recommended Action Transition between ingress and egress mode will cause temporary loss of traffic, to prevent this use the command mls ip replication-mode ingress.

Error Message

```
MLSM-6-MMLS_NO_EGRESS_LOCAL_IN_INGRESS: MMLS : Egress Local feature is NOT applicable in Ingress mode :
```

Explanation When the system transistions from Egress replication mode to ingress, the Egress Local feature will become non-applicable even if the Egress Local feature is enabled.

Recommended Action This is only to inform the user that Egress Local feature is not applicable in Ingress mode. If the Egress Local feature is required, actions need to be taken to restore the system replication mode to egress.

Error Message

```
%MLSM-6-PVLAN_INSTALL_FAILURE: Unable to locate secondary-vlan for ([IP_address],[IP_address],[dec]), Flow will be software switched
```

Explanation The RP was not able to determine the secondary VLAN for the source in the secondary VLAN. After a given number of unsuccessful retries, the RP does not install the shortcut in hardware. This condition can occur when a new flow is installed or an RPF change occurs. The flow changes from being hardware-switched to being software-switched.

Recommended Action Ensure that the ARP table is populated for the sources in the secondary VLAN by entering the **ping** command to the source. Also ensure that the ARP table contains the primary VLAN as well as the secondary VLAN information. To enable creation of a hardware shortcut, enter the **clear ip mroute** group source command, with group being the name or IP address of the multicast group and source being the multicast source that is sending to the group, for the specified flow.

```
%MLSM-6-SCP_ERROR: MMLS: SCP failure detected between RP and SP
```

Explanation An SCP failure has been detected between the RP and the SP. This condition can occur when the EOBC channel or the NMP is so busy that the MSFC does not receive a response, even after several retries by the ICC layer. This condition can also occur when the system is under heavy load and communication between the RP and SP cannot be maintained.

Recommended Action MMLS attempts to recover from this condition by sending a message to the SP. The restart message to the SP has an exponential time window of 160 seconds.

Error Message

%MLSM-6-SM_INSTALL_FAILURE: interface/mask entry installation failed on [IP_address]/[dec], vlan[dec]

Explanation The interface or mask entry that is used to punt directly connected sources to the router could not be installed in the hardware CEF table. This condition indicates that the system is running out of available CEF entries. Some traffic might be "blackholed" (not forwarded) for the sources that are directly connected on the specified interface.

Recommended Action Modify the network configuration so that hardware resource limitation is not affected, and ensure that the interface and mask entries are installed.

Error Message

```
%MLSM-7-SC_TCAM_FULL_ERROR: TCAM space not available to install the ([IP_address],[IP_address]) entry in the Hardware
```

Explanation An "(s,g)" or "(*,g)" entry could not be installed in the hardware CEF table. This condition can occur when the system is running out of available CEF entries.

Recommended Action Modify the network configuration so that the hardware resource limitation is not reached and ensure that the "(s,g)" or "(*,g)" entry is installed.

MLS_ACL_COMMON Messages

Error Message

%MLS_ACL_COMMON-4-LOG_UPDATE_NO_RL: ACL TCAM update (%s direction) occured on interface %s; %s action taken %s msec

Explanation ACL TCAM Update happened on the mentioned interfaceDuring the period TCAM is updated the mentioned security action is takenfor the given duration

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information..

Error Message

%MLS_ACL_COMMON-4-LOG_UPDATE_RL: ACL TCAM update (%s direction) occured on interface %s; %s action taken %s msec

Explanation ACL TCAM Update happened on the mentioned interfaceDuring the period TCAM is updated the mentioned security action is takenfor the given duration

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MLS_CEF_ISSU-2-MLS_CEF_RETRY_FAIL: Unable to get maximum routes config from Active RP.

Explanation Unable to get maximum route configuration from Active RP. System will configure to default values. Reload is required to correct this.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

MLS_RATE Messages

Error Message

%MLS_RATE-4-CPP_DISABLED_IN_HW: Control Plane Policing NOT performed in hardware, due to the presence of egress QoS.

Explanation The Control Plane Policing (CPP) cannot be performed in hardware when the system is running in PFC3A mode AND egress QoS is configurated on anyother interface. In this case the CPP will be performed only in softwareuntil egress QoS will be present in the running configuration.

Recommended Action There are only two ways for the problem not to occur: removing any egressQoS from the running configuration, or (recommended) upgrading the system toPFC3B or PFC3BXL

Error Message

%MLS_RATE-4-CPP_RE_ENABLED_IN_HW: Control Plane Policing will now be performed in hardware.

Explanation The Control Plane Policing (CPP) cannot be performed in hardware when the system is running in PFC3A mode AND egress QoS is configurated on anyother interface. This message has been printed after the egress QoShas been removed from the running configuration.

Recommended Action There are only two ways for the problem not to occur: removing any egressQoS from the running configuration, or (recommended) upgrading the system toPFC3B or PFC3BXL

Error Message

%MLS_RATE-4-DISABLING: The Layer2 Rate Limiters have been disabled.

Explanation This feature is turned off with this hardware configuration.

Recommended Action The Layer 2 Rate Limiters are not supported with this combination of linecards, please refer to the feature usage guidelines for more details.

Error Message

%MLS_RATE-4-ENABLING_FIB_GLEAN_RECEIVE: [chars] will be subject to the output ACLs of the input VLAN

Explanation When the FIB glean or FIB receive rate limiters are enabled, adjacency redirect is used. The router performs an egress lookup on the incoming interface and the result is applied on the incoming packets.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

%MLS_RATE-4-LIMITING_DOWN: MLS HARDWARE RATE-LIMITING functionality is not active

Explanation There is not enough memory resources to support this functionality.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MLS_RATE-4-NOT_SUPPORTED: This functionality is not configurable.

Explanation This functionality is not active with this hardware configuration.

Recommended Action The command is not allowed with this set of line cards, please referto the feature usage guidelines for more details.

Error Message

%MLS_RATE-4-NO_DHCP_RESOURCE: DHCP Snooping requires 2 Rate Limiters

Explanation Not enough Hardware Rate Limiter for DHCP Snooping.

Recommended Action DHCP Snoopiing requires two Hardware Rate Limiters. They might be all used. To display the features using these hardware registers, enter the show mls rate-limit usage command. To be able to program the rate limiters for DHCP Snooping, deconfigure some of the configured rate limiters.

Error Message

%MLS_RATE-4-NO_RESOURCE: The hardware Rate Limiters are fully used

Explanation No more hardware Rate Limiter are available.

Recommended Action The EARL supports a limited number of Hardware Rate Limiters. They may be all used. To display the features using these hardware registers type 'show mls rate-limit usage'. To be able to program a rate limiter for the new feature deconfigure one of the configured rate limiters.

%MLS_RATE-4-OVERWRITING_PORTSEC_DEFAULT: Port security rate limiter was set to non-default value.

Explanation Overwriting the default port security rate value.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

Error Message

%MLS_RATE-4-OVERWRITING_VALUE: Overwriting the rate value for: %s case

Explanation Some rate limiters share the same hardware register. This message is printed out if programming a new rate limiter is causing the overwriting of previously configured one.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%MLS_STAT-4-IPX_LEN_ERR: MAC/IPX length inconsistencies

Explanation One or more packets have been received with an IPX length that does not match the physical length.

Recommended Action Issue the show mls statistics command to gather data that might help identify the nature of the error. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging, show tech-support and show mls statistics commands and your pertinent troubleshooting logs.

%MLS_STAT-4-IPX_TOO_SHRT: Too short IPX packets received

Explanation One or more packets have been received with IPX minimum-length check errors.

Recommended Action Issue the show mls statistics command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show mls statistics command output, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging, show tech-support and show mls statistics commands and your pertinent troubleshooting logs.

Error Message

%MLS_STAT-4-IP_CSUM_ERR: IP checksum errors

Explanation One or more packets with IP checksum errors have been received.

Recommended Action Issue the show mls statistics command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error frm the output of the show mls statistics command, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging, show tech-support and show mls statistics commands and your pertinent troubleshooting logs.

Error Message

%MLS_STAT-4-IP_LEN_ERR: MAC/IP length inconsistencies

Explanation One or more packets have been received that have an IP length that does not matching the physical length.

Recommended Action Issue the show mls statistics command to gather data that might help identify the nature of the error. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at

http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging**, **show tech-support** and show mls statistics commands and your pertinent troubleshooting logs.

Error Message

%MLS_STAT-4-IP_TOO_SHRT: Too short IP packets received

Explanation One or more packets have been received with an IP minimum length check error.

Recommended Action Issue the show mls statistics command to gather data that might help identify the nature of the error. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging, show tech-support and show mls statistics commands and your pertinent troubleshooting logs.

Error Message

%MLRIB-4-TOPOLOGY_ROUTE_LIMIT_REACHED: Route topology scope [dec] has reached its maximum route capacity of [dec]

Explanation The number of routes installed in a route topology scope has exceeded the maximum limit. No more routes can be installed in this topology scope until the number reduces to 95 percent of the maximum limit.

Recommended Action Route some of the data packets to their destinations through other route topology scopes.

MMLS Messages

Error Message

%MMLS-6-ADJ_ALLOC_FAILURE: Failed to allocate Adjacency for the multicast flow (%i, %i)

Explanation we are unable to allocate an adjacency for this particular flow. The affected flow will be retried and will be software switched until it gets successfully installed in the hardware.

Recommended Action The adjacency table utilization could be very high and need to be brought down.Removing some hardware switched flows would help solve the problem.

%MMLS-6-BIDIR_ADJ_LIMIT_EXCEEDED: Failed to allocate Adjacency for Bidir Multicast shortcuts, exceeded limit of (%d), subsequent flows will be software switched.

Explanation The system limit of Maximum adjacencies for Bidir shortcuts is exceeded and as a result any new multicast flow will be software switched.

Recommended Action The number of bidir multicast flows are too large to fit in the hardware. There is no workaround.

Error Message

%MMLS-6-FIB_LIMIT_EXCEEDED: Failed to allocate FIB entry, exceeded system limit of (%d) entries.

Explanation Maximum FIB entry limit is exceeded and thus FIB entries cannot be allocated by the MMLS.

Recommended Action The total number of Multicast shortcuts are too large to fit in the FIB table and as a result subsequent shortcuts will be software switched. There is no workaround.

Error Message

%MMLS-6-MET_LIMIT_EXCEEDED: Failed to allocate MET entry, exceeded system limit of (%d) entries. Number of times MET limit is exceeded in the last 1 min : %ld

Explanation Maximum MET entry limit is exceeded and thus MET entries cannot be allocated by the MMLS.

Recommended Action The total number of oifs are too large to fit in the MET table and as a result the subsequent shortcuts or oifs will be software switched. There is no workaround.

Error Message

%MMLS-6-MMLS_EGRESS_INCAPABLE_LC_INSERTED: MMLS : Egress incapable line card (%d) inserted in forced egress replication mode

Explanation Inform the user that an egress incapable LC is inserted while the system is operating in forced egress replication mode. The user must not source any multicast traffic on this egress incapable line card

Recommended Action The user needs to make sure not to source any multicast traffic on this egress incapable line card.

 $MMLS-6-MMLS_EGRESS_INCAPABLE_LC_PRESENT: MMLS : Egress incapable line card present while forcing replication mode to egress$

Explanation Inform ther user that there is at least one LC that is egress incapable when the user configure forced egress replication mode on the system. The user must not source any multicast traffic on the egress incapable line card

Recommended Action The user needs to make sure not to source any multicast traffic on the egress incapable line cards.

Error Message

 $MMLS-6-MMLS_LEGACY_LC_PRESENT: MMLS : Legacy line card present, system cannot operate in egress replication mode$

Explanation Inform the user that there is at least one legacy line card in the system, and therefore the system cannot operate in egress replication mode when the user configures forced egress replication mode on the system

Recommended Action If the user wants the system to operate in forced egress replication mode, the legacy card/cards need to be removed.

Error Message

%MMLS-6-RPF_ADJ_LIMIT_EXCEEDED: Failed to allocate Adjacency for multicast shortcuts with RPF-vlan: (%d), exceeded limit of (%d), subsequent flows will be software switched

Explanation The system limit of Maximum adjacencies for Multicast shortcuts with the same RPF is exceeded and as a result any new multicast flow will be software switched.

Recommended Action The number of multicast flows with the same RPF interface are too large to fit in the hardware. There is no workaround.

Error Message

 $%MMLS-6-RP_LIMIT_EXCEEDED$: Failed to allocate DF index for Bidir-RP, exceeded limit of (%d) RPs for VPN : (%d). Shortcuts for RP : (%i) will be software switched.

Explanation The system limit of 4 RPs per VPN is exceeded and as a result the mutlicast flows for the groups served by this RP will be sofware switched.

Recommended Action The configured RPs are too large to fit in the DF table for one VPN. Try to confugure the groups among existing RPs in hardware or configure the RP in another VPN.

 $MMLS-6-VLAN_ADD_FAILURE_ON_MET_FULL:$ Error adding vlan %d to the MET table of some shortcuts

Explanation The MET table is full and we are unable to add the vlan to some shortcuts. The affected shortcuts will not switch traffic for that vlan

Recommended Action The MET utilization is very high and need to be brought down Removing some vlans or switching to ingress replication mode will solve the problem.

Error Message

%MMLS_RATE-3-MMLS_PARTIAL_SC_ERROR: Error installing Multicast Partial-sc rate-limiter.Operation failed.

Explanation Multicast partial-sc rate-limiter could not be configured due to an error returned from SP

Recommended Action The reason for this error could be because the LTL index for the partial-sc rate-limiter may not have been initialized yet. Please give some time and try again.

MMODEM Messages

Error Message

%MMODEM-3-HWFAIL: Cannot determine hardware version for integrated modem Network Module in slot %d.

Explanation The integrated modem Network Module hardware may be bad.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

%MMODEM-3-IMAGEBAD: Integrated modem image file %s cannot be loaded.

Explanation The integrated modem override file does not contain valid image(s).

Recommended Action The integrated modem Network Module will be loaded with the default software image(s). Copy the error message exactly as it appears, and report it to your technical support representative.

%MMODEM-3-IMAGEHWINCOMPATMAX: Integrated modem image file %s cannot be loaded because it requires a minimum integrated modem Network Module hardware version between %X and %X, inclusive.

Explanation The integrated modem override file is not compatible with the version of integrated modem hardware.

Recommended Action The integrated modem Network Module will be loaded with the default software image(s). This override file can only be used with specified Network Module hardware versions.

Error Message

%MMODEM-3-IMAGEHWINCOMPATNOMAX: Integrated modem image file %s cannot be loaded because it requires a minimum integrated modem Network Module hardware version of %X.

Explanation The integrated modem override file is not compatible with the version of integrated modem hardware.

Recommended Action The integrated modem Network Module will be loaded with the default software image(s). This override file can only be used with specified Network Module hardware versions.

Error Message

%MMODEM-3-IMAGEIOSINCOMPATMAX: Integrated modem image file %s cannot be loaded because it requires an IOS version between %d.%d(%d.%d) and %d.%d(%d.%d), inclusive

Explanation The integrated modem override file is not compatible with the version of IOS running on this router.

Recommended Action The integrated modem Network Module will be loaded with the default software image(s). This override file can only be used with specified IOS versions.

Error Message

MMODEM-3-IMAGEIOSINCOMPATNOMAX: Integrated modem image file %s cannot be loaded because it requires an IOS version of %d.%d(%d.%d) or later.

Explanation The integrated modem override file is not compatible with the version of IOS running on this router.

Recommended Action The integrated modem Network Module will be loaded with the default software image(s). If you wish to use this modem override image file, you must upgrade to the specified IOS version.

%MMODEM-3-IMAGEWRONGTYPE: Integrated modem image file %s cannot be loaded

Explanation The integrated modem override file does not contain valid firmware image(s).

Recommended Action The integrated modem Network Module will be loaded with the default software image(s). Copy the error message exactly as it appears, and report it to your technical support representative.

MN_SPA_PTP Messages

Error Message

%MN_SPA_PTP-3-BITS_CLOCK: [chars] : SPA bits transmit clock has encountered error : [hex].

Explanation The shared port adapter (SPA) bits transmit clock has failed.

Recommended Action Perform an online insertion and removal (OIR) on the SPA.

Error Message

%MN_SPA_PTP-3-GMII_LINKUP_DOWN: GMII Links are [chars] and [chars] for ports 1 and 2 respectively on the SPA.

Explanation The gigabit media independent interface (GMII) link status has changed on the shared port adapter (SPA).

Recommended Action Perform an online insertion and removal (OIR) on the SPA.

Error Message

%MN_SPA_PTP-3-SEMAHOG: SEMAHOG by SPA [chars] Process holding Sema is [chars]

Explanation SEMAPHORE LOCK ERROR

Recommended Action Remove the config which caused this

Error Message

%MN_SPA_PTP-4-PTP_CLOCK_MODE: SPA [dec]/[dec] is working in PTP SLAVE or Boundary modeexternal clock on BITS port would be PTP recovered clock

Explanation Info regarding external clock in PTP slave mode

Recommended Action No further action required. (This is an INFORMATION message, not an error Message.)

%MN_SPA_PTP-6-CONFIG_CHANGE: Change in ToP configuration on [dec]/[dec]. This will result into Termination of all existing PTP sessions on [dec]/[dec].

Explanation To take effect of new/changed configuration required restart of PTP session

Recommended Action No further action required. (This is an INFORMATION message, not an error Message.)

Error Message

%MN_SPA_PTP-6-SPLL_STATE_CHANGE: Recovered clock in [dec]/[dec] status changed to [chars]

Explanation Recovered clock status change information. This is an informational message. No action is required.

MODEM Messages

The following are router-shelf modem management messages.

Error Message

%MODEM-1-BADEVENT: Invalid modem management %s event 0x%02x for modem(%d/%d)

Explanation Either out of range value of unknown event received by the modem management.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

MODEM-1-BADMODEM: Modem (%d/%d) failed %s

Explanation The modem maintenance process is reporting a modem related error.

Recommended Action Record the reason at the end of the message, and report the problem.

```
%MODEM-1-DL_DSP_FAIL: Modem (%d/%d) failed DSP download (%d): %s
```

Explanation This message says the DSP download was not successful.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MODEM-1-DL_FAIL: Firmware download failed for slot %d module_mask %x
```

Explanation The modem modules did not send back an Initialized message after the download.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MODEM-1-DL_FAIL_BADFREE: Item to be freed is in queue(s) [chars]. Slot [dec] module_mask [hex]
```

Explanation An attempt to free the download information structure was aborted.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%MODEM-1-DL_FAIL_FILE_XFER: Firmware download failed for slot %d module_mask 0x%x due to file transfer error

Explanation The download of a portware file to the modem card over DSIP as part of a modem firmware upgrade attempt timed out and failed to complete successfully

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MODEM-1-DL_LOSS_FAIL: Firmware download failure for slot %d module %d

Explanation The portware download for the module was previously deferred but when later ready to be performed the information needed for the download had been lost %MODEM-1-DL PROC FAIL: Portware download process creation failed

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MODEM-1-DL_PROC_FAIL: Portware download process creation failed

Explanation A portware download process creation has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

 $MODEM-1-MBRI_HWREV:$ The MBRI network module in slot %d is incompatible with the digital modems installed in the router.

Explanation This MBRI network module cannot be used with digital modems.

Recommended Action Copy the error message exactly as it appears, and contact your technical support representative for upgrade information.

```
%MODEM-1-MODEMOK: Modem (%d/%d) %s
```

Explanation This is informational to indicate that the modem is OK.

Recommended Action None

Error Message

MODEM-1-MODEMPOLLOFF: Modem Status Poll Off after bad status poll event <math display="inline">0x 02x for $modem(\d^{d})$

Explanation Modem status polling is turned off because the bad event received.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MODEM-1-PRI_HWREV: The T1 or E1 network module in slot %d is incompatible with the digital modems installed in the router.

Explanation This T1 or E1 network module cannot be used with digital modems.

Recommended Action Copy the error message exactly as it appears, and contact your technical support representative for upgrade information.

Error Message

%MODEM-3-BADMODEMNUM: Error: Trying to access an invalid modem [dec]

Explanation The requested operation could not be accomplished because of a bad modem number.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%MODEM-3-MODEMOOS: Modem number [dec]/[dec] is marked oos, Cause: [chars]

Explanation The modem was marked as out of service for one of two causes. Either it was taken out of service by the CSM because the modem failed to disconnect and then be reconnected (OHOOK and OFFHOOK) or it was taken out of service by modem management on receiving an "out of service" event.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

 $MODEM-3-MODEMSTART_OUTOFMEM: Error -- Unable to allocate memory to startup modem board in slot %d$

Explanation Running out of memory during modem board startup.

Recommended Action If this message is seen then save the output of show memory showing the amount of processor and IO memory usage only along with show version, and call your technical support representativ for assistance.

Error Message

%MODEM-3-MODEM_INFO_CREATE_FAIL: Unable to create modem infos for slot %d

Explanation During OIR of this board the modem infos attempted to be created but failed due to lack of memory

Recommended Action If this message is seen then save the output of show memory showing the amount of processor and IO memory usage only along with show version, and call your technical support representativ for assistance.

Error Message

%MODEM-3-PWDNLDPROC: Portware download manager process start-up failed

Explanation The attempt to start up the portware download manager process at initialization time failed and so portware download requests cannot be handled.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance,

open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MODEM-3-UNEXPECTED_DC_EV: Error -- dc state machine received unexpected event=%d for modem(%d/%d)

Explanation DC session received unexpected modem management event.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

 $MODEM-3-UNEXPECTED_DC_STATE: Error -- dc state machine in unknown state=%d for modem(%d/%d)$

Explanation DC state machine got into an unknown state.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

 $MODEM-3-UNEXPECTED_RTN_CD_FROM_SND: Error -- unexpected rtn code %d after oobp snd for modem(%d/%d)$

Explanation After oobp message sent to modem, an unexpected return code received.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%MODEM-3-UNEXPECTED_STATUS_EV: Error -- status state machine received unexpected event=%d for modem(%d/%d)

Explanation Status Polling state machine received unexpected event.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

 $MODEM-3-UNEXPECTED_STATUS_STATE: Error -- status state machine in unknown state=%d for modem(%d/%d)$

Explanation Status Polling state machine got into an unknown state.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MODEM-4-B2BABORT: Modems (%s) and (%s) back-to-back test: aborted

Explanation This is a tracing message indicating a back-to-back test failed between the two specified MICA modems.

Recommended Action Perform more back to back tests by pairing the failed modems with other modems to determine which modem is bad. Check the failed modems again after performing a power cycle. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

```
%MODEM-4-BADMODEMS: Modems (%s) and (%s) failed back-to-back test: %s
```

Explanation The two modems reported in the message failed a back-to-back test. At least one of them has failed.

Recommended Action Perform more back to back tests by pairing the failed modems with other modems to determine which modem is bad. Check the failed modems again after performing a power cycle. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MODEM-4-NO_TIME_FOR_DC: Warning -- Not enough time to process DC session
```

Explanation The DC (direct-connect) session did not have enough time to complete.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MODEM-5-B2BCONNECT: Modems (%d/%d) and (%d/%d) connected in back-to-back test: %s
```

Explanation This is informational to indicate that the back to back test connection has been made between the selected modems.

Recommended Action None.

Error Message

```
%MODEM-5-B2BINIT: Auto Back-to-Back test initiated by %s
```

Explanation Failed to initialize modem for back to back test.

Recommended Action Repeat the test on other modems, if problem persists: Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

MODEM-5-B2BMODEMS: Modems (%d/%d) and (%d/%d) completed back-to-back test: success/packets = %d/%d

Explanation The reported modems have passed the back to back test without any error.

Recommended Action None.

Error Message

%MODEM-5-BADMODEMS: Modems (%d/%d) and (%d/%d) failed back-to-back test: %s

Explanation The reported modems failed the back to back test.

Recommended Action Perform more back to back tests by pairing the failed modems with other modems to determine which modem is bad.

Error Message

%MODEM-5-CLEAR_NVRAM_NO_FLASH: modem (%d/%d) downloaded from Bundled IOS

Explanation The DSP software for the specified modem was downloaded from a Bundled IOS due to unavailability of the modem's software from NVRAM.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MODEM-5-CONFIG: Configurations fast-answer and country %s conflict. Configuration fast-answer disabled.

Explanation The fast-answer configuration conflicts with the country setting. The country was given priority and fast-answer was disabled.

```
%MODEM-5-DL_DSP_GOOD: Modem (%d/%d) completed DSP download: %s
```

Explanation This is just an informational message saying DSP download was successful.

Recommended Action No action is required.

Error Message

```
%MODEM-5-DL_DSP_START: Modem (%d/%d) started DSP download
```

Explanation This is just an Informational message saying DSP download has started.

Recommended Action No action is required.

Error Message

```
%MODEM-5-DL_GOOD: Modem (%d/%d) completed firmware download: %s
```

Explanation Modem maintenance process completed downloading the firmware

Recommended Action None.

Error Message

```
%MODEM-5-DL START: Modem (%d/%d) started firmware download
```

Explanation Modem maintenance process started downloading the firmware.

Recommended Action None.

Error Message

```
%MODEM-5-FLEXIBLE: %s
```

Explanation This message type is created for all those messages which have simple ASCII text and does not take any parameter. Message tells what the problem is.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

```
%MODEM-5-MODEM_OK: Modem (%s) passed the test
```

Explanation Tests on the specified modem were successful.

Recommended Action No action is required.

Error Message

```
%MODEM-5-MODEM_RECOVERY: Modem (%s) %s
```

Explanation Modem recovery has been triggered. Configured action will take place on given modem

Error Message

```
%MODEM-5-MODEM_RECOVERY_DL: Slot %d, Module %d: %s
```

Explanation Module download information.

Error Message

```
%MODEM-5-MODEM_RECOVERY_PROCESS: %s
```

Explanation Modem Recovery Process information %MODEM-5-NO_FLASH_FILE : Flash file %s not found for DSP download

Explanation User has used COPY FLASH MODEM to download microcom modems, but later erased the flash.

Recommended Action This is just a Informational message saying the DSP code will be downloaded from the Bundled IOS. So no specific action is required. The operator might choose to copy the firmware image to FLASH/BOOTFLASH and copy to Modems.

Error Message

```
%MODEM-5-NO_FLASH_FILE: Flash file [chars] not found for DSP download
```

Explanation The copy flash modem command was used to download Microcom modems, but the user later erased the Flash file. The digital signal processor code will be downloaded from the bundled Cisco IOS software.

Recommended Action No action is required.

Error Message

```
%MODEM-5-NO_TIME_FOR_DC: Warning -- Not enough time to process DC session
```

Explanation Warning message only, the DC session did not have enough time to process.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MODEMCALLRECORD-3-PM_CALL_RECORD_ERROR: %s
```

Explanation Record Generated Exceeded Syslog Capability

Recommended Action No action is required.

Error Message

```
%MODEMCALLRECORD-3-PM_NO_CALL_RECORD_BUF: %s
```

Explanation Failed to allocate a buffer to build the modem call record

Recommended Action No action is required.

Error Message

```
%MODEMCALLRECORD-6-PM_TERSE_CALL_FAILED_RECORD: %s
```

Explanation Terse Modem Call Failed Record

Recommended Action No action is required.

Error Message

```
%MODEMCALLRECORD-6-PM_TERSE_CALL_RECORD: %s
```

Explanation Terse Modem Call Record

Recommended Action No action is required.

Error Message

```
%MODEM_CALLREC-3-SMARTACF_ERROR_CALL_REC: [chars]
```

Explanation The system has written a call record for a failed modem call involving the SmartACF modem chip set.

```
%MODEM_CALLREC-3-SMARTACF_TERSE_CALL_REC: [chars]
```

Explanation The system has written a call record for a successful modem call involving the SmartACF modem chip set.

Recommended Action No action is required.

MODEM_HIST Messages

The following are router-shelf Modem History/Tracing messages.

Error Message

```
%MODEM_HIST-3-CONTROL: %s: Control Reply: 0x%02x%02x
```

Explanation Trace log event -- Control Reply.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-CSM_IC_CALLED_NUM: %s: ISDN incoming called number: %s
```

Explanation Trace log event -- ISDN incoming called number.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-CSM_IC_CALLING_NUM: %s: ISDN incoming caller number: %s
```

Explanation Trace log event -- ISDN incoming caller number.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-CSM_MODEMDEAD: [chars]:[chars] Cause: [chars]
```

Explanation This message is a trace log event. A timeout occurred while a modem was being disconnected and then reconnected (ONHOOK and OFFHOOK). The modem will be marked as out of service so that it can be recovered.

```
%MODEM_HIST-3-CSM_OC_CALLED_NUM: %s: ISDN outgoing called number: %s
```

Explanation Trace log event -- ISDN outgoing called number.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-DC_EVT_POLL: %s: DC session response: %s
```

Explanation Trace log event -- DC Session response event.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-DC_SESSION: %s: DC Session received reply
```

Explanation Trace log event -- DC Session received reply.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-END_CALL: %s Modem %d/%d %s
```

Explanation Informational end-of-modem-call message.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MODEM_HIST-3-MICA_DYNAMIC_EVT: %s: %s %s
```

Explanation Trace log event -- MICA dynamic event.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-MICA_END_CONN_EVT: %s: %s %s
```

Explanation Trace log event -- MICA end connection event.

```
%MODEM_HIST-3-MICA_LEAD_EVT: %s: %s %s, %s, %s, %s
```

Explanation Trace log event -- MICA lead event.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-MICA_OOS_EVT: %s:%s Cause: %s
```

Explanation Trace log event -- MICA out of service event.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-MICA_STARTUP_EVT: %s: %s %* % Modem firmware = %d.%d.%d.%d
```

Explanation Trace log event -- MICA start up event.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-MICA_STATE_EVT: %s: %s %*s State: %s
```

Explanation Trace log event -- MICA state event.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-MICA_STATIC_EVT: %s: %s %s
```

Explanation Trace log event -- MICA static event.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-MICA_STATUS_EVT: %s: %s %s Modem firmware = %d.%d.%d.%d
```

Explanation Trace log event -- MICA status event.

%MODEM_HIST-3-POLL_ANALOG: %s: Modem Analog signal event: TX = %d, RX = %d, Signal to noise = %d

Explanation Trace log event -- Modem Analog signal event.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-POLL_CALLER_ID: %s: Caller ID event: %s
```

Explanation Trace log event -- Caller ID event.

Recommended Action No action is required.

Error Message

%MODEM_HIST-3-POLL_CONN_1: %s: Connection event: TX/RX Speed = %u/%u, Modulation = %s

Explanation Trace log event -- Connection event part 1.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-POLL_CONN_2: %s: Direction = %s, Protocol = %s, Compression = %s
```

Explanation Trace log event -- Connection event part 2.

Recommended Action No action is required.

Error Message

 $MODEM_HIST-3-POLL_CONX_UPDATE:$ %s: Connection update event: TX/RX Speed = %u/%u, Modulation = %s

Explanation Trace log event -- Connection Update event.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-POLL_DSP_NEEDED: %s: DSP Image Needed Event
```

Explanation This message says DSP image needs to be downloaded to modem for achieving 56K operation.

Recommended Action Download the DSP image to the modem.

```
%MODEM_HIST-3-POLL_DTR: %s: DTR event: %s
```

Explanation Trace log event -- DTR event.

Recommended Action No action is required.

Error Message

 $MODEM_HIST-3-POLL_END_1: %s: End connection event: Retransmits for MNP block (TX/RX) = %d/%d$

Explanation Trace log event -- End Connection event part 1.

Recommended Action No action is required.

Error Message

```
MODEM_HIST-3-POLL\_END_2: %s: Duration = %d:%-02d:%-02d, Number of TX/RX char = %d/%d
```

Explanation Trace log event -- End connection event part 2.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-POLL_END_3: %s: Local Disc Reason = %s, Remote Disc Reason = %s
```

Explanation Trace log event -- End connection event part 3.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-POLL_ERROR: %s: Polling protocol error event: 0x%02x
```

Explanation Trace log event -- Polling protocol erro event.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

```
%MODEM_HIST-3-POLL_EVT_LOST: %s: Status event lost: 0x%02x
```

Explanation Trace log event -- Status event lost.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MODEM_HIST-3-POLL_INACT: %s: Modem Activity event: %s
```

Explanation Trace log event -- Modem Activity event.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-POLL_MODEM_STATE: %s: Modem State event: %s
```

Explanation Trace log event -- Modem State event.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-POLL_NO_RESP: %s: No poll response event: 0x%02x
```

Explanation Trace log event -- No poll response event.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MODEM_HIST-3-POLL_PHONE: %s: Phone number event: %s
```

Explanation Trace log event -- Phone number event.

```
%MODEM_HIST-3-POLL_PROGRESS: %s: Call Progress event: %s
```

Explanation Trace log event -- Call Progress event.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-POLL_RS232: %s: RS232 event: %s%c %s%c %s%c %s%c %s%c %s%c %s%c
```

Explanation Trace log event -- RS232 event.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-POLL_TX_RX: %s: TX/RX event: TXD=%s, RXD=%s
```

Explanation Trace log event -- TX/RX event.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-POLL_UNKNOWN: %s: Unknown or lost event 0x%02x
```

Explanation Trace log event -- Unknown or lost event.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MODEM_HIST-3-STARTUP: %s: Startup Response: %s. %*s Modem (boot) firmware = %d.%d.%d (%d.%d.%d)
```

Explanation Trace log event -- Startup Response.

```
%MODEM_HIST-3-TRACE_HDR: Modem %d/%d Events Log:
```

Explanation Trace log file header.

Recommended Action No action is required.

Error Message

```
%MODEM_HIST-3-UNKNOWN_FRAME: %s: Error in events log
```

Explanation Trace log event -- an event can not be read.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MODEM_HIST-7-CONTROL: %s: Control Reply: 0x%02x%02x
```

Explanation This is a tracing message indicating a reply to a control message was received.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-CSM_IC_CALLED_NUM: %s: ISDN incoming called number: %s
```

Explanation This is a tracing message indicating the number of the ISDN line recieving a call.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-CSM_IC_CALLING_NUM: %s: ISDN incoming caller number: %s
```

Explanation This is a tracing message indicating the number of an incoming ISDN caller.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-CSM_OC_CALLED_NUM: %s: ISDN outgoing called number: %s
```

Explanation This is a tracing message indicating a dialed ISDN number.

```
%MODEM_HIST-7-MICA_DEBUG_EVT: %s: %s:
```

Explanation This is a tracing message indicating a host debug event reported by the specified MICA modem.

Recommended Action

Error Message

```
%MODEM_HIST-7-MICA_DYNAMIC_EVT: %s: %s: %s
```

Explanation This is a tracing message indicating a dynamic event reported by the specified MICA modem.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-MICA_END_CONN_EVT: %s: %s: %s
```

Explanation This is a tracing message indicating an end-connection event from the specified MICA modem.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-MICA_LEAD_EVT: %s: %s:%s, %s, %s, %s
```

Explanation This is a tracing message indicating a lead event reported by the specified MICA modem.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-MICA_OOS_EVT: %s: %s %*s Cause: %s
```

Explanation This is a tracing message indicating an out-of-service event from the specified MICA modem.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-MICA_STARTUP_EVT: %s: %s %s. %*s Modem firmware = %d.%d.%d.%d
```

Explanation This is a tracing message indicating successful startup of the specified MICA modem.

```
%MODEM_HIST-7-MICA_STATE_EVT: %s: %s %*s State: %s
```

Explanation This is a tracing message indicating a state event reported by the specified MICA modem.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-MICA_STATIC_EVT: %s: %s: %s
```

Explanation This is a tracing message indicating a static event reported by the specified MICA modem.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-MICA_STATUS_EVT: %s: %s: %s. %*s Modem firmware = %d.%d.%d.%d
```

Explanation This is a tracing message indicating a status event reported by the specified MICA modem.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-POLL_ANALOG: %s: Modem Analog signal event: TX = %d, RX = %d, Signal
to noise = %d
```

Explanation This is a tracing message indicating a change in analog signal status.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-POLL_CALLER_ID: %s: Caller ID event: %s
```

Explanation This is a tracing message indicating caller ID data received.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-POLL_CONN_1: %s: Connection event: TX/RX Speed = %u/%u, Modulation = %s
```

Explanation This is a tracing message indicating establishment of a connection.

```
%MODEM_HIST-7-POLL_CONN_2: Direction = %s, Protocol = %s, Compression = %s
```

Explanation This is a continuation of the connection state tracing message.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-POLL_CONX_UPDATE: %s: Connection update event: TX/RX Speed = %u/%u,
Modulation = %s
```

Explanation This is a tracing message indicating a connection state change.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-POLL_DTR: %s: DTR event: %s
```

Explanation This is a tracing message indicating a change in the DTR signal.

Recommended Action This is a debug message only. No action is required.

Error Message

```
MODEM_HIST-7-POLL\_END_1: %s: End connection event: Retransmits for MNP block (TX/RX) = %d/%d
```

Explanation This is a tracing message indicating end-of-connection status.

Recommended Action This is a debug message only. No action is required.

Error Message

```
MODEM_HIST-7-POLL\_END_2: Duration = d: -02d: -02d, Number of TX/RX char = d/dd
```

Explanation This is a continuation of the end-of-transmission status message.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-POLL_END_3: Local Disc Reason = %s, Remote Disc Reason = %s
```

Explanation This is another continuation of the end-of-transmission status message.

```
%MODEM_HIST-7-POLL_ERROR: %s: Polling protocol error event: 0x%02x
```

Explanation This is a tracing message indicating a polling protocol error.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-POLL_EVT_LOST: %s: Status event lost: 0x%02x
```

Explanation This is a tracing message indicating a polling event was lost.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-POLL_INACT: %s: Modem Activity event: %s
```

Explanation This is a tracing message indicating a change in data activity status.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-POLL_MODEM_STATE: %s: Modem State event: %s
```

Explanation This is a tracing message indicating a modem state change.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-POLL_NO_RESP: %s: No poll response event: 0x%02x
```

Explanation This is a tracing message indicating that no response was received to a poll.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-POLL_PHONE: %s: Phone number event: %s
```

Explanation This is a tracing message indicating a phone number being dialed.

```
%MODEM_HIST-7-POLL_PROGRESS: %s: Call Progress event: %s
```

Explanation This is a tracing message indicating status of a call in progress.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-POLL_RS232: %s: RS232 event: %s%c %s%c %s%c %s%c %s%c %s%c %s%c
```

Explanation This is a tracing message indicating RS232 events.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-POLL_TX_RX: %s: TX/RX event: TXD=%s, RXD=%s
```

Explanation This is a tracing message indicating transmit and receive events.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-POLL_UNKNOWN: %s: Unknown or lost event 0x%02x
```

Explanation This is a tracing message indicating that the modem event history contained an unrecognized event. One or more events may be missing from the trace.

Recommended Action This could be caused by insufficient space to store the modem history. If these events are desirable, a possible remedy is to shorten the number of events recorded between history dumps. Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

```
%MODEM_HIST-7-STARTUP: %s: Startup Response: %s. Modem (boot) firmware = %d.%d.%d
(%d.%d.%d)
```

Explanation This is a tracing message indicating successful startup of the specified modem.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_HIST-7-TRACE_HDR: %s Modem %s Events Log:
```

Explanation This is the initial message for the trace of the specified modem. The modem's stored trace message(s) will follow.

```
%MODEM_HIST-7-UNKNOWN_FRAME: %s: Error in events log
```

Explanation This is a tracing message indicating a formatting error in the modem event history. One or more events may be missing from the trace.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%MODEM_NV-5-FLEXIBLE: %s
```

Explanation This message type is created for all those messages which have simple ASCII text and does not take any parameter. Message tells what the problem is.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

MOHAWK_SM Messages

Error Message

```
%MOHAWK_SM-1-INITFAIL: NM slot [dec]: PCI device [dec] initialization failed
```

Explanation The initialization of the IDS Sensor network module has failed.

Recommended Action Power down, reseat the interface card, and reboot the system. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%MOHAWK_SM-1-MULTIPLEREGISTRATION: NM slot [dec]: PCI device [dec] multiple IDS service modules not allowed

Explanation Another IDS Sensor service module is already installed.

Recommended Action Power down, reseat the interface card, and reboot the system. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at

http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

MONITOR Messages

The following are IOS ROM Monitor messages.

Error Message

%MONITOR-3-VARRESTFAIL: ROM monitor variable restoration of '[chars]', failed.

Explanation The new ROM monitor variable could not be written to memory, and the ROM monitor variable could not be restored to its original value.

Recommended Action Issue the show tech-support and show bootvar commands to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support and show bootvar command output, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MONITOR-3-VARSETFAIL: ROM monitor variable set of '[chars]' failed.

Explanation The system could not set a ROM Monitor variable. This condition typically occurs when no ROM monitor memory is available to save the variable. The ROM monitor memory is most likely already filled with configuration **boot** commands.

Recommended Action Enter the **show bootvar** command and review the output to see if there is anything unusual with the system. Try to reduce the number of configuration boot commands.

MOTCR Messages

Error Message

%MOTCR-1-ALIGN: Alignment failure on packet buffer: [hex]

Explanation A software error has occurred. MOTCR driver detected that the buffer is not aligned correctly.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MOTCR-1-ERROR: [chars]

Explanation An error has occured in the MOTCR driver.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MOTCR-1-INITFAIL: [chars]

Explanation MOTCR driver failed to initialize at the specified point.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

```
%MOTCR-1-MOTCR_PROC_ALIGN: MOTCR Command Processor alignment error:
([chars]=[hex])
```

Explanation MOTCR Command Processor alignment error.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MOTCR-1-MOTCR_PROC_INIT: MOTCR Command Processor initialization failed: ([chars])
```

Explanation MOTCR Command Processor initialization failed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MOTCR-1-NOMEMORY: [chars] creation failed
```

Explanation MOTCR driver could not allocate memory for the specified data structure.

Recommended Action Consider adding more memory. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%MOTCR-1-OWNER: [chars] packet buffer, pak=[hex]

Explanation A software or hardware error occurred. MOTCR driver detected that the buffer ring is in an inconsistent and unrecoverable state.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MOTCR-1-PKTENGREQCOUNT_ERROR: MOTCR PktEngReqCount = [dec] is not valid.

Explanation The MOTCR packet engine request count should be 0 or 1. Any other value is a failure.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MOTCR-1-PKTENGREQCOUNT_ERROR1: MOTCR PktEngReqCount = [dec] is not valid.

Explanation The MOTCR packet engine request count should be 0. Any other value is a failure.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%MOTCR-1-PKTENGRESULT_ERROR: MOTCR PktEngEntry-Result.destinationCount = [hex]
and the result_len [hex] don't match

Explanation MOTCR Packet Engine operation failed length check.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MOTCR-1-PKTENGRET_ERROR: MOTCR PktEng Return Value = [hex], [chars].

Explanation MOTCR Packet Engine returned error code.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MOTCR-1-TOOBIG: [chars] received a packet with size [dec].

Explanation Software supports up to **** MTU.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

```
%MOTCR-1-TX_ERROR: [chars]: [dec] bytes
```

Explanation MOTCR driver cannot allocate a buffer for Tx packet because the requested size is too big.

Recommended Action Use a smaller packet size. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MOTCR-3-CMD_ERR: MOTCR command returned error: ([hex])
```

Explanation MOTCR returned an error code when processing a command.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MOTCR-3-MOTCR_PROC_ERR: MOTCR Command Processor error: ([chars])
```

Explanation MOTCR Command Processor error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%MOTCR-3-NVRAMFAIL: MOTCR could not read its own NVRAM configuration: ([dec])

Explanation MOTCR NVRAM error.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MOTCR-6-SHUTDOWN: [chars] shutting down
```

Explanation The specified MOTCR is shutting down. It may have been physically removed.

Recommended Action This is an informational message only. It occurs in normal operation. No action is required.

MPA68360 Messages

The following are VIP Multi-Channel port adapter messages.

Error Message

```
%MPA68360-1-DWNLDCKSM: Failed for bay %d, sent = 0x%x, received = 0x%x
```

Explanation The download of the internal firmware to the MPA68360 failed to checksum correctly. This usually indicates a hardware failure of the MPA6836

Recommended Action Perform a power cycle. If the problem persists, the MPA68360 hardware may have a problem.

Error Message

```
%MPA68360-1-DWNLDFAIL: Microcode to port adaptor in bay [dec]
```

Explanation A microcode download to the port adapter in the specified bay has failed.

Recommended Action Try reseating the PA correctly. If the problem persists, verify the operability of the hardware by inserting the PA in another router. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance,

open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%MPA68360-1-INITFAIL: Slot [dec]: [chars]
```

Explanation The PRI port adapter has failed to complete its hardware initialization.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MPA68360-1-NOTCMPLT: Microcode download to bay [dec] failed
```

Explanation The MPA68360 hardware has failed. It could not download its operational microcode.

Recommended Action Try reseating the PA correctly. If the problem persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%MPA68360-1-NOTREADY: Bay [dec] for microcode download
```

Explanation An error has occurred on the communication path between the driver and the MPA68360.

Recommended Action Try reseating the PA correctly. If the problem persists, verify the operability of the hardware by inserting the PA in another router. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance,

open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%MPA68360-1-STARTFAIL: [chars] channel not enabled
```

Explanation A software or hardware error has occurred. The MPA68360 serial interface is not responding to initialization commands.

Recommended Action Enter the debug serial interface command on the Cisco 7200 VIP. When this message recurs, collect the output, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Recommended Action Note Turning on debugging for the serial interface can cause a flood of debug messages if a lot of serial interfaces are configured. Enter the **no debug serial interface** command to disable debugging as soon as you collect the information.

Error Message

```
%MPA68360-1-STOPFAIL: %s channel not disabled
```

Explanation The PRI port adaptor failed to respond to a request to disable an interface.

Recommended Action Enable debug serial interface on 7200/VIP and when this message is seen again collect the output, copy the error message exactly as it appears, contact your Cisco technical support representative and provide the representative with the gathered information. Note: Turning on debug serial interface can cause a flood of debug messages if a lot of serial interfaces are configured hence turn the debug of as soon asthe information is collected.

Error Message

```
%MPA68360-3-MBXREAD: [chars] has stale msg - mbx0:[hex], mbx1:[hex], mbx2:[hex]
```

Explanation The MPA68360 has not responded to a message within a specified time.

Recommended Action Try reseating the PA correctly. If the problem persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at

http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%MPA68360-3-NOTMPA68360: Bay [dec] device ID seen as [hex], expected [hex]
```

Explanation The MPA68360 hardware has failed. A device other than the MPA68360 pointed at the software for the MPA68360 serial.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MPA68360-3-PANIC: Exception [dec], trace [dec]
```

Explanation The MPA68360 firmware has detected an illegal or unexpected CPU exception or condition. This condition may be caused by a software error or by a hardware failure.

Recommended Action Try reseating the PA correctly. If the problem persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

MCP Messages

Error Message

%MPC-0-NOMEM: [chars] Attempt to acquire memory failed, pc: [hex], at [int]

Explanation A call to create a pool or get a buffer has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

 $MPC-0-SYSMGT_ERROR1: MPC Subch detected error in sysmgt call: invalid CMPC DEVICE length$

Explanation An invalid parameter has been received in a system management call.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%MPC-0-SYSMGT_ERROR2: MPC Subch detected error in sysmgt call: invalid operation [dec]

Explanation An invalid parameter has been received in a system management call.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%MPC-0-SYSMGT_ERROR3: MPC Llcc-Tg detected error in sysmgt call: invalid operation [dec]

Explanation An invalid parameter has been received in a system management call.

%MPC-0-SYSMGT_ERROR4: MPC Llcc-Tg detected error in sysmgt call: invalid CMPC DEVICE length

Explanation An invalid parameter has been received in a system management call.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-BAD_CONFIG_CODE: [chars]: Unrecognized config action code [dec]
```

Explanation A TG configuration command has been received containing an unrecognized action code.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-BAD_CONFIG_DIR: PA[dec] MPC [hex]-[hex] bad direction code [hex]
```

Explanation The configuration message for a CMPC statement contains an invalid direction code.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-BAD_DLC_CMD: Received MPC DLC command [hex] unrecognized
```

Explanation An MPC DLC frame has been received with an unrecognized DLC command.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-BAD_FLAGS: Received MPC frame with invalid flags [hex]
```

Explanation An MPC block has been received with an unrecognized header configuration.

%MPC-3-BAD_HDR: Unrecognized MPC header received: [hex] [hex]

Explanation An MPC block has been received with an unrecognized header configuration.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%MPC-3-BAD_INB_BFR: Inbound bfr to CMPC has no room for header

Explanation The CMPC is attempting to build a DLC header, but there is insufficient space in the inbound buffer.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%MPC-3-BLOCK_SEQ_ERROR: Block rcvd with seq num [hex], expected [hex]

Explanation An MPC block has been received with a sequence number error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%MPC-3-CFG_TYPE_ERR: [chars]: CMPC TG partner type code invalid

Explanation The CMPC TG configuration block contains an invalid partner type code.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%MPC-3-CMPCP_ACT_ERR: Activate, but CvInfo block already active with handle [dec]

Explanation An attempt has been made to activate an MPC+ control block that is already active.

```
%MPC-3-CMPCP_BLK_FMT_ERR: [chars]: [chars]
```

Explanation An MPC+ channel block that contains a format error has been received.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-CMPCP_CV_ERR1: Unrecognized/Unexpected CV : [hex]
```

Explanation An unrecognized or unexpected MPC+ subvector has been received from the host.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-CMPCP_CV_ERR2: Possible Config error: Rcvd [chars] [chars], [chars] [chars]
```

Explanation CMPC+ has detected a mismatch between a value received from the host and a configured or generated value. A configuration error may have occurred.

Recommended Action If this is not the case, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-CMPCP_CV_ERR3: Corrupt CV Frame: [chars]
```

Explanation A received CV frame is corrupted.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-CMPCP_CV_LEN_ERR: Received subvector [hex] too long
```

Explanation An MPC+ subvector that is longer than the area reserved on the basis of protocol analysis has been received from the host.

```
%MPC-3-CMPCP_DUPL_TOKEN: Duplicate group token, '[chars]' PA[dec] MPC [hex]-[hex]
```

Explanation An XID2 message from the host specifies a group token that has already been specified for another TG. A configuration error in which multiple read or write subchannels are specified in a TRLE may have occurred.

Recommended Action If this is not the case, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-CMPCP_FRAME_ERR1: [chars]: Frame rcvd on [chars] token [chars]
```

Explanation A problem has been detected with an MPC+ frame token.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-CMPCP_FRAME_ERR2: [chars]: Frame rcvd on [chars] token, [chars]: [hex]
```

Explanation A specific field in an MPC+ subvector received from the host is not recognized.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-CMPCP_HANDLE_ERR: All CMPC+ handles in use
```

Explanation An MPC+ handle cannot be allocated because the handle pool is empty.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-CMPCP_INACT_ERR: Inact, but CvInfo block already inactive
```

Explanation An attempt is made to deactivate an MPC+ control block that is already inactive.

```
%MPC-3-CMPCP_PROT_ERR: [chars]: Unrecognized Protocol Type: [hex]
```

Explanation The host has attempted to set the protocol type for a connection to a value not recognized by CMPC+.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-CMPCP_TOKEN_ERR: Error in rcvd MPC+ local token: [chars]
```

Explanation An invalid condition has been detected in a received local token.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-CMPCP_TOKEN_LEN_ERR: Token detectd with invalid size: [dec]
```

Explanation A token with an invalid length has been detected.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-CONFIG_ERR: TG configured IP but channel protocol not MpcPlus
```

Explanation The host has attempted a channel connection to a TG but did not use the correct channel protocol (MPC+). A configuration error may have occurred.

Recommended Action If this is not the case, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-CV_CMGR_FSM_ERR: [chars]: Event [chars], State [chars]
```

Explanation An internal state machine has attempted to execute an event that is inconsistent with the state.

```
%MPC-3-CV_PROT_FSM_ERR: [chars]: Event [chars], State [chars]
```

Explanation An internal state machine has attempted to execute an event that is inconsistent with the state.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-LENGTH_ERR: Inconsistent length in received MPC frame for TG [chars]
```

Explanation An MPC frame has been received with a length value that is inconsistent with the channel block length.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-PARTNER_CFG_ERR: [chars]: [chars]
```

Explanation A configuration command has failed because the MPC partner linkage is not established.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-PARTNER_FSM_ERR: TG Name: [chars], Event [chars], State [chars]
```

Explanation An internal state machine has attempted to execute an event inconsistent with the state.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-SUBCH_FSM_ERR: PA[dec] MPC [hex]-[hex] Event [chars], State [chars]
```

Explanation An internal state machine has attempted to execute an event inconsistent with the state.

```
%MPC-3-SWEEP_FSM_ERR: TG Name: [chars], Event [chars], State [chars]
```

Explanation An internal state machine has attempted to execute an event inconsistent with the state.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-SWEEP_SEQ_ERROR: Sweep rcvd with seq num [hex], expected [hex]
```

Explanation An MPC sweep command has been received with a sequence number error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-XID2_BAD_DATA: Invalid Xid2 Message: bad length or format
```

Explanation An MPC subchannel is in the XID2 exchange state, and the message received has a length that is not valid for an XID2 message segment.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-XID2_BAD_HDR: Unrecognized Xid2 header received
```

Explanation An Xid2 frame has been received and with a header configuration that is not recognized.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-3-XID2_FSM_ERR: PA[dec] MPC [hex]-[hex] Event [chars], State [chars]
```

Explanation An internal state machine has attempted to execute an even that is inconsistent with the state.

```
%MPC-6-BAD_DIRECTION: PA[dec] MPC [hex]-[hex] configured for [chars]
```

Explanation An XID2 message from the host has specified a subchannel read or write transfer direction that is different from the direction configured.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-6-CMPCP_CONN_ACT: [chars]: [chars] Connection Activated
```

Explanation An IP type connection has been activated.

Recommended Action No action is required.

Error Message

```
%MPC-6-CMPCP_CONN_INACT: [chars]: [chars] Connection Deactivated
```

Explanation An IP type connection has been deactivated.

Recommended Action No action is required.

Error Message

```
%MPC-6-CMPCP_CV_LOG: [chars]: Event/State [chars]/[chars]
```

Explanation This informational message is given before CMPCP_CV_ERR type messages to provide a more complete description of the problem.

Recommended Action See the CMPCP_CV_ERR message that follows.

Error Message

```
%MPC-6-CMPCP_STALE_TOKEN: Rcvd MPC+ local token is stale
```

Explanation A local token was received that is no longer in use.

Recommended Action This action probably occurred during a TG shutdown sequence, with no associated operational problems. If an operation problem occurred, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

```
%MPC-6-INIT: PA[dec] MPC [hex]-[hex] Device initialized
```

Explanation An MPC device has been initialized. The device string is in the form PAx MPC yyyy-zz, where x is the port adapter number, yyyy is the path, and zz is the device number.

Recommended Action No action is required.

Error Message

```
%MPC-6-LENGTH_ERR_DATA: Additional LENGTH_ERR message data: [hex][hex][hex][hex][hex][hex][hex]
```

Explanation This informational message immediately follows a LENGTH_ERR_INFO message if frame data exists.

Recommended Action Copy this message, along with the contents of the LENGTH_ERR and LENGTH_ERR_INFO messages. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-6-LENGTH_ERR_INFO: Additional LENGTH_ERR message info: currBfr [hex], msg_length [hex]
```

Explanation This informational message immediately follows and amplifies a LENGTH_ERR message.

Recommended Action Copy this message, along with the contents of the LENGTH_ERR message, Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MPC-6-LINK_CONFIGURED: Link [chars] already configured
```

Explanation An attempt has been made to configure an MPC link that has already been configured.

Recommended Action No action is required.

Error Message

```
%MPC-6-NODE_NOT_ACTIVE: Host attempted activation of [chars] but TG not configured
```

Explanation A message has been received for an MPC link for which the transmission group has not been configured.

Recommended Action Configure the required TG. This process may require the host node or profile to be cycled down and up.

%MPC-6-SEQ_NUM_WRAP: Sequence number from host wrapped. TG name [chars]

Explanation The sequence number in a block from the host has wrapped.

Recommended Action No action is required.

Error Message

```
%MPC-6-SHUTDOWN: PA[dec] MPC [hex]-[hex] Device shutdown
```

Explanation An MPC device has been shut down. The device string is in the form PAx MPC yyyy-zz, where x is the port adapter number, yyyy is the path, and zz is the device number.

Recommended Action No action is required.

Error Message

```
%MPC-6-TOO_MANY_TGS: Cannot configure more than [dec] MPC TGs
```

Explanation This informative message has been given when an attempt is made to configure more than the maximum number of MPC TGs.

Recommended Action No action is required.

MPF Messages

Error Message

%MPF-2-INIT: Failed to initialize [chars] support

Explanation During startup insufficient resources were available to support the functionality described within the MPF switching module. The support will be provided by the next level of switching.

%MPF-2-QUEUEITEMS: Item count [int] exceeds [chars] queue size

Explanation During initialization the subsystem was unable to set up the queue headers which are required to provide the switching module representation of the interfaces and sub-interfaces. Without the queue headers the switching module is inoperable. In this instance the requested number of items in the list exceeds the maximum.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Issue the show ip mpf vcci summary command to gather data that may help identify the nature of the error. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-2-SESSIONLIST: [chars] session list is inconsistent, head [hex_addr]

Explanation Upon the closing of the what is expected to be the only remaining session across all tunnels it was found that the list of sessions is inconsistent in that while none should remain there appears to be a head to the list.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-2-SETUPQUEUE: Failed to setup [chars] queue headers

Explanation During initialization the subsystem was unable to set up the queue headers which are required to provide the switching module representation of the interfaces and sub-interfaces. Without the queue headers the switching module is inoperable.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show ip mpf vcci summary command to gather data that may help identify the nature of the error. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%MPF-2-TUNNELLIST: [chars] tunnel list is inconsistent, headUnrecognized format `%p'

Explanation Upon the closing of the what is expected to be the only remaining tunnel it was found that the list of tunnels is inconsistent in that while none should remain, there appears to be a head to the list.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPF-2-TUNNELREMOVE: Failed to remove tunnel [int]/[int]
```

Explanation On closing the last session on the tunnel, it was found that it could not be removed. This is an unexpected condition but should not impact other tunnels or sessions.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPF-3-ADJQUEUE: Failed to [chars]queue [chars] [chars] adjacency id [chars] for [chars] [ipv6-addr]
```

Explanation The allocation or deallocation of an MPF adjacency failed in the action of adding or removing from the MPF representation of the adjacency table.

```
%MPF-3-FIBQUEUE: Failed to [chars]queue table [int] FIB entry [IP_address][IP_netmask] ([hex_addr]/[hex_addr])
```

Explanation The allocation or deallocation of a MPF FIB entry for a particular prefix and mask failed in the action of adding or removing from the MPF representation of the particular forwarding table.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPF-3-LIMISMATCH: Load sharing ([hex_addr]) for table [int] FIB entry [IP_address][IP_netmask] ([hex_addr]) mismatch ([hex_addr])
```

Explanation The FIB load sharing entry for a particular prefix and mask does not match that which was originally assigned to the MPF variant of the leaf. No updates will occur upon the detection of this condition.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPF-3-LIQUEUE: Failed to [chars]queue table [int] FIB entry [IP_address][IP_netmask] load sharing ([hex_addr]/[hex_addr])
```

Explanation The allocation or deallocation of a MPF FIB load sharing entry for a particular prefix and mask failed in the action of adding or removing from the MPF representation of the load sharing information

%MPF-3-NOMAPTABLE: Attempt to update null maptable index [int] of VCCI [int] encapsulation [int]

Explanation The map table has a null value which is incorrect and as such the attempt to update the table for a particular interface/sub-interface has failed. The updates will not be forwarded to the switching module thus it may retain the previous configuration. This is an unexpected condition

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the show ip mpf vcci summary command to gather data that may help identify the nature of the error. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-3-STATS: Failed to [chars] CPU [int] background statistics retrieval

Explanation The action of either starting or stopping the statistics retrieval for the specified CPU has been unsuccessful. Should the former condition be relevant then no statistics will be reported for MPF.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MPF-3-VCCIMAX: VCCI [int] out-with range

Explanation An attempt to use a VCCI which is out-with of the maximum supported has been recorded.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the show ip mpf vcci summary command to gather data that may help identify the nature of the error. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%MPF-4-BACKWARD_IF_COUNTER: Corrected [chars] backward counter [chars] [chars] current [int] previous [int]

Explanation The interface specified in the message has a packet counter that has decreased in number. This condition can occur if a packet is counted and then either punted or dropped. This event was detected and corrected.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-4-BACKWARD_SEG_COUNTER: Corrected [chars][chars] backward counter [chars] [chars] current [int] previous [int]

Explanation The Layer 2 segment specified in the message has a packet counter that has decreased in number. This condition can occur if a packet is counted and then either punted or dropped. This event was detected and corrected.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-4-BADSTATMSG: [chars]: [chars]

Explanation MPF sent a bad statistics message to the IOS image.

%MPF-4-CPDPSEND: Failed to send [chars] to CPU [int] switching module

Explanation MPF has failed to send a message/request to specified CPU switching module. This may include configuration or the retrieval of information. It is possible that this is a transient condition but the switching module may have an inconsistent state. A reapplication of certain configuration may be required.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-4-DISABLEDFEATURESUPPORT: Interface [chars]: [chars] is an unsupported MPF feature and is DISABLED.

Explanation The specified feature configured on the given interface is not supported by any MPF CPUs. The configuration is disabled by MPF, resulting in the feature not being applied for MPF switched packets. Because the feature is disabled, MPF switched interfaces will not allow the unsupported feature to be configured on the interface.

Recommended Action Unavailable.

Error Message

```
%MPF-4-FEATUREEXISTS: [chars] [chars] already exists
```

Explanation The attempt to add a features has detected that it already exists. This is an unexpected condition.

%MPF-4-FEATUREINTERFACE: [chars] [chars] failed to find interface for VCCI [int]

Explanation A feature is notifying of being supported or unsupported but it has failed to update the applicable adjacencies. This is an unexpected condition.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-4-FEATUREMASK: [chars] feature [int] failed to record [chars] status

Explanation A feature is notifying of being supported or unsupported but it does not exist within the set of features which are considerd valid. This is an unexpected condition.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-4-FEATURENOEXIST: [chars] features do not exist

Explanation Features are attempting to be removed without previously having been added. This is an unexpected condition.

```
%MPF-4-FEATURENOTFOUND: [chars] [chars] not found
```

Explanation The feature information pertaining to a interface cannot be located when attempting to add or remove the feature. This is an unexpected condition.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPF-4-HWIDBSETUP: Interface [chars] [chars] is missing
```

Explanation An unexpected condition has occurred while attempting to initialize the main interface representing an instance in the module. The interface will not be forwarded via MPF.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-4-IFINFOFREE: Failure to free info [hex_addr] from [chars] subblock [hex_addr]

Explanation The interface information pertaining to a major or minor interface has failed to be unlinked and freed from the list corresponding to the hwidb.

%MPF-4-IFINFOINSERT: Failure to attach info [hex_addr] to [chars] subblock [hex_addr]

Explanation The interface information pertaining to a major or minor interface has failed to be added to the list corresponding to the hwidb.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-4-IFINFOREMOVE: Failure to remove info [hex_addr] from [chars] subblock [hex_addr]

Explanation The interface information pertaining to a major or minor interface has failed to be removed from the list corresponding to the hwidb.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-4-IGNOREDFEATURES: Interface [chars]: [chars][chars] configurations are not MPF supported and are IGNORED.

Explanation The specified feature configured on the given interface is not supported by any MPF CPUs. The configuration is ignored by MPF resulting in the feature not being applied for MPF switched packets. Because the feature is ignored, MPF switched interfaces having the unsupported feature configured will not have packets punted to IOS. IOS switched packets have the feature applied.

%MPF-4-MAPQUEUE: Unable to find queue header for encapsulation [int]

Explanation A particular encapsulation which is not supported has attempted to allocate resources from a map table.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the show ip mpf vcci summary command to gather data that may help identify the nature of the error. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-4-NOCURRENTIFINFO: Failed to find [chars] current if info

Explanation The interface information pertaining to a minor interface is not present. This is an unexpected condition.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-4-NOFEATUREIFINFO: [chars] [chars] has no if info

Explanation The interface information pertaining to a interface is not present when attempting to add or remove a feature. This is an unexpected condition.

%MPF-4-NOFEATURESUPPORT: Interface [chars]: [chars] is an unsupported MPF feature and is IGNORED.

Explanation The specified feature configured on the given interface is not supported by any MPF CPUs. The configuration is ignored by MPF resulting in the feature not being applied for MPF switched packets. Because the feature is ignored, MPF switched interfaces having the unsupported feature configured will not have packets punted to IOS. IOS switched packets have the feature applied.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPF-4-NOFIRSTIFINFO: Failed to find [chars] first if info
```

Explanation The interface information pertaining to a major interface is not present. This is an unexpected condition.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the show ip mpf interface subblock command to gather data that may help identify the nature of the error. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPF-4-NOHWIDB: Interface [chars] is null
```

Explanation An unexpected condition has occurred which is due to the absence of a main interface structure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the show ip mpf interface subblock command to gather data that may help identify the nature of the error. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

```
%MPF-4-NOHWLEAF: [chars]: hwleaf is null
```

Explanation An unexpected condition has occurred which is due to the absence of a hwleaf structure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the show ip mpf interface subblock command to gather data that may help identify the nature of the error. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPF-4-NOIFINFO: Failed to find [chars] if info index [int]
```

Explanation The interface information pertaining to a minor interface is not present. This is an unexpected condition.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPF-4-NOIFINFOFEATURE: [chars] [chars] for [chars] has no feature
```

Explanation The feature information pertaining to a interface is not present when attempting to add or remove the feature. This is an unexpected condition.

%MPF-4-NOIPCEF: MPF disabled due to IP CEF disabled

Explanation IP CEF is required for MPF switching to work.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-4-NOL2XINFO: L2 session 12x info is null

Explanation The layer two session info pertaining to a session is null which is unexpected.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-4-NOMAP: Interface [chars] info map is absent for [chars] encapsulation

Explanation The interface does not have a mapping table for the interface info which is attached on a minor interface basis. It is allocated and attached when the major interface is transformed into a MPF representation and as such contains the information for all future configuration of sub-interfaces. Its absence is an unexpected error and will result in missing information within the switching module.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show ip mpf interface name subblock command to gather data that may help identify the nature of the error. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

```
%MPF-4-NOQUEUEHDR: Queue header is null
```

Explanation The queue header has a null value, which is incorrect. This is an unexpected condition.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the show ip mpf vcci summary command to gather data that may help identify the nature of the error. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPF-4-NOSB: [chars]: subblock is null
```

Explanation An unexpected condition has occurred which is due to the absence of a subblock structure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the show ip mpf interface subblock command to gather data that may help identify the nature of the error. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPF-4-NOSEGMENT: L2 [chars] segment is null
```

Explanation The segment pertaining to a session is null, which is unexpected.

%MPF-4-NOSESSION: L2 session is null

Explanation The L2 session is null, which is unexpected.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-4-NOSESSIONINFO: L2 [chars] session if info is null

Explanation The interface information pertaining to a session is null, which is unexpected.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-4-NOSESSIONLIST: L2 session list is null for VCCI [int] [chars] [chars]

Explanation The L2 session list is empty which is unexpected as it should contain the information pertaining to any switched or terminated sessions.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%MPF-4-NOSESSIONPREV: [chars] VCCI/Sn [int]/[int] [chars] session [hex_addr] previous is null

Explanation The session in the process of being removed has been determined to have a null previous pointer within the list of sessions.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPF-4-NOSWIDB: Sub-interface [chars] is null
```

Explanation An unexpected condition has occurred which is due to the absence of a swidb structure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Issue the show ip mpf interface subblock command to gather data that may help identify the nature of the error. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPF-4-NOVC: Interface [chars] cannot locate VC [int] for VCCI [int]
```

Explanation The ATM interface does not have a corresponding VC entry for the specified VCD. This may be due to configuration.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%MPF-4-PORTBIND: Port failed to register [chars] with MPF

Explanation The port has failed during initialization to register the interface which is being created with the MPF subsystem. This is due to an error within the MPF subsystem and it will result on no MPF forwarding for this interface, all traffic will proceed via the next level of switching.

Recommended Action Call your technical support representative and report the error message, the system version, and the router configuration. (Use the show version command to obtain the software version.)

Error Message

%MPF-4-SBFIND: Unable to get [chars] subblock

Explanation The operation to dereference the main interface and locate the MPF information has failed to find the structure. This is an unexpected condition and indicates an issue with the initialization of the interface linkage for this functionality.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Issue the show ip mpf interface namesubblock command to gather data that may help identify the nature of the error. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-4-SBSETUP: Unable to setup [chars] subblock

Explanation The operation to setup the main interface MPF information has failed. This may be due to a lack of resources or the requested subblock type may be out of range. The result is that the configuration will not be supported out-with of the RP as the switching module will not have a representation of this interface.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show ip mpf interface name subblock command to gather data that may help identify the nature of the error. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%MPF-4-SWIDBMISMATCH: Attempt to configure existing [chars] with [chars]

Explanation An attempt to configure a feature has detected that the feature itself is still configured from a previous configuration set. As a result the existing configuration will remain.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the show ip mpf vcci command to gather data that may help identify the nature of the error. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-4-UNKNOWNSEGMENT: L2 segment type [int]

Explanation The segment pertaining to a session has a type which is either not supported or is invalid.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-4-VLANID: [chars] VLAN ID [int] is invalid

Explanation The configuration has provided a VLAN identifier that is out-with the valid range. The configuration is rejected in this case.

%MPF-6-ENCAPCHANGE: Attempt to change [chars] encapsulation to [chars]

Explanation The default interface encapsulation cannot be changed for this type of interface.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-6-HWIDBINIT: Interface [chars] has already been initialized

Explanation An attempt has been made to initialize the interface for MPF support which is currently active.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPF-6-MODULE: CPU [int] [chars]

Explanation The switching module on the particular CPU has notified the RP of its current state.

Recommended Action No action is required.

Error Message

%MPF-6-NOVCCI: Failed to allocate a VCCI for [chars]

Explanation The system has depleted the resource of identifiers which on an individual basis identifies an interface. The interface will not be supported by MPF.

Recommended Action There are a limited set of resources allocated for MPF. Disabling or modifying configuration on an interface or session basis would free resources such that reapplying the configuration may succeed.

%MPF-6-SWIDBINIT: Interface [chars] has already been initialized

Explanation An attempt has been made to initialize the interface for MPF support, which is currently active.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPLSIFMIB-3-GENERAL: [chars]

Explanation A memory corruption of MPLS layer subblock may have occurred. The cause is unknown.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

MPLSMFISTATIC Messages

Error Message

%MPLSMFISTATIC-3-CHUNKMGR: [chars] [hex]

Explanation An MPLS MFI static application chunk manager error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%MPLSMFISTATIC-3-FCALLFAILED: [chars]

Explanation A static application function call has failed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MPLSMFISTATIC-3-INVALIDPRAMS: [chars] [dec]

Explanation Unexpected parameters have been detected in a static application.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MPLSMFISTATIC-3-WRONGCODEPATH: [chars]

Explanation An error involving an unexpected static application code path has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

MPLSOAM Messages

Error Message

%MPLSOAM-3-COMM_UNKNOWN_RC: Unexpected oce return code

Explanation Comm module - unexpected oce return code encountered

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

Error Message

%MPLSOAM-3-WALK_CONSUMED: %s

Explanation A postencapsulation output feature in the Multiprotocol Label Switching (MPLS) Operation and Management (OAM) software has incorrectly sent a walk packet to a real interface. This event does not affect the overall system performance.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPLSOAM-3-XDR_COMM: %s:0x%x 0x%x

Explanation XDR Comm module - Unexpected RP/LC XDR condition encountered in MPLS OAM software. This may result in MPLS OAM FIB sub-blocks becoming out of synchronization between RP and LC. This should not affect overall system.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance,

open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPLSOMGRE_SHIM-3-NOMEM: Memory Allocation Failure - [chars] : [chars]([hex])
```

Explanation The memory required to service one or more Network Processors could not be allocated.

Recommended Action This error may indicate that more memory must be installed on the affected card or platform in order to service all the features and related entities enabled via the configuration. Try to reload the Cisco IOS software image on the affected card or platform. If the error persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in non-zipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

MPLS_ADJ_SB Messages

Error Message

```
%MPLS_ADJ_SB-4-NO_BACKUP_INTF: [chars] - ifnum [dec]
```

Explanation Backup interface cannot be programmed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

Error Message

```
%MPLS_ATM_TRANS-3-CONSISTENCY: [chars]
```

Explanation An action attempted by the ATM over MPLS implementation has encountered an unexpected condition.

MPLS_COMMON Messages

Error Message

%MPLS_COMMON-3-L3_CONFIG_NOT_RECOMMENDED: LAN interfaces have MPLS configured. Do not configure xconnect on interface vlans.

Explanation An attempt was made to configure a xconnect on an interface VLAN. The current network configuration has MPLS configured on a LAN interface.

Recommended Action Do not configure xconnects on an interface VLAN if the network has MPLS configured on a LAN interface.

Error Message

%MPLS_COMMON-3-OSM_BB1_CONFIG_UNSUPPORTED: The maximum label range configured for this system exceeds the %u limit supported by the module in slot %u. For proper MPLS functionality on any of the interfaces on this module the maximum label range should be set to %u.

Explanation The OSM module cannot support the MPLS label range configured for this system

Recommended Action Change the maximum mpls label range using the command: mpls label range.

Error Message

 $MPLS_COMMON-3-VPLS_CONFIG_EXCEEDED: The number of EoMPLS/VPLS VCs exceeded the maximum supported on %i/%u.$

Explanation The number of destination routers or the global number of virtual circuits exceeded the maximum supported by the box.

Recommended Action Refer to network configuration guidelines for the maximum limits.

Error Message

%MPLS_COMMON-4-ATOM_ON_MPLS_TE_ONLY: ATOM traffic supported only on MPLS TE tunnels currently ATOM traffic uses interface %s

Explanation AToM traffic is supported only on MPLS TE tunnels and not on any other type of tunnels like GRE tunnels. Right now AToM traffic is using the mentioned tunnel interface.

Recommended Action Please make sure AToM traffic does not use non-MPLS TE tunnels.

```
%MPLS_IPRM-3-DB: [chars]
```

Explanation There is an inconsistency in the information that is required to either request labels from an IP label distribution module or process labels received from an IP label distribution module.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MPLS_IPRM-3-DB_PATH: [chars]
```

Explanation There is an inconsistency in the information about a prefix path that is required to either request labels from an IP label distribution module or process labels received from an IP label distribution module.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MPLS_IPRM-3-DB_PNDG_DISC: [chars]
```

Explanation There is an inconsistency in the information about a temporarily deferred action that is required to populate the MPLS forwarding data structures for a prefix.

```
%MPLS_IPRM-3-DB_TABLE: [chars]
```

Explanation There is an inconsistency in the information about a VRF table ID that is required to either request labels from an IP label distribution module, or process labels received from an IP label distribution module.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MPLS_IPRM-3-DB_TRANS: [chars]
```

Explanation There is an inconsistency in the information about an ongoing transaction that is required to populate the MPLS forwarding data structures for a prefix.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MPLS_IPRM-3-INTERNAL: [chars]
```

Explanation An operation required for proper operation of the IP rewrite manager has failed.

```
%MPLS_IPRM-3-PATH_LABEL_DEL: [chars]
```

Explanation An attempt to delete MPLS forwarding information for the specified prefix has failed.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPLS_IPRM-3-PATH_LABEL_GET: [chars]
```

Explanation An attempt to access MPLS forwarding information for the specified prefix has failed.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPLS_IPRM-3-PATH_LABEL_UPD: [chars]
```

Explanation An attempt to update MPLS forwarding information for the specified prefix has failed.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPLS_IPRM-3-REWRITE_DEL: [chars]
```

Explanation An attempt to delete MPLS forwarding information for the specified prefix has failed.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying

information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%MPLS_IPRM-3-REWRITE_GET: [chars]
```

Explanation An attempt to access MPLS forwarding information for the specified prefix has failed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MPLS_IPRM-3-REWRITE_UPD: [chars]
```

Explanation An attempt to update MPLS forwarding information for the specified prefix has failed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MPLS_IPRM-3-WALK: [chars]
```

Explanation A request by an IP label distribution module (for example, LDP or BGP) to traverse a CEF table cannot be processed.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%MPLS_LBL_CHKPT_MGR-3-CF_CLIENT_REG_FAIL: [chars]
```

Explanation The MPLS NSF checkpoint manager has failed to register to the CF.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MPLS_LBL_CHKPT_MGR-3-LSD_LABEL_ALLOC: [chars]
```

Explanation MPLS NSF Label manager has failed to allocate a label.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MPLS_LBL_CHKPT_MGR-3-LSD_LABEL_FREE: [chars] [dec]
```

Explanation The MPLS NSF label manager has failed to free a label.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at

http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%MPLS_LBL_CHKPT_MGR-3-MPLS_CF_FAIL: [chars], message seq no [dec], current seq no [dec]

Explanation The MPLS NSF label manager has failed to deliver a message.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MPLS_LBL_CHKPT_MGR-3-MPLS_CF_MALLOC_FAIL: [chars]

Explanation The MPLS NSF checkpoint manager has failed to allocate memory.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MPLS_LC-3-MALLOCFAIL: failed to create %s

Explanation The system failed to allocate memory for an MPLS entry for the incoming label. Some MPLS packets might be forwarded by the software.

Recommended Action Reduce other system activitiy to ease memory demands. If necessary, increase system memory. When more memory is available, wait for a few minutes and enter the clear ip route command. If sufficient memory has not been made available, this message will be displayed again. If the problem persists, please report it to your technical service representative.

%MPLS_LC-3-TCAMFAIL: failed to insert label %d to TCAM

Explanation This condition might occur if the total number of VLANs in use exceeds 4096. VLAN resource is shared by vlans used for SVI, vlans used for sub-interface, hidden vlans used for routed port and internal vlans used for some vrfs. An internal vlan is needed when IP QoS feature is applied to a vrf interface. If the total vlans in use exceed 4096, no more internal vlan can be allocated so IP QoS features will not be applied to MPLS-IP packets.

Recommended Action Reduce the total number of VLANs in use by removing SVI interfaces, sub-interfaces and/or VRF interfaces.

Error Message

%MPLS_PACKET-3-FWDDISABLE: MPLS [chars] forwarding path disabled

Explanation The MPLS forwarding plane has been disabled.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MPLS_PACKET-3-FWDREENABLE: MPLS [chars] forwarding path reenabled

Explanation MPLS forwarding plane re-enabled.

Recommended Action This is an informational message only. No action is required.

Error Message

%MPLS_PACKET-3-LABELCACHE: %s %d/%d

Explanation label cache error

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%MPLS_PACKET-4-FWDREENABLE: MPLS [chars] forwarding path reenabled

Explanation The MPLS forwarding plane has been reenabled.

Recommended Action No action is required.

Error Message

%MPLS_PACKET-4-NOLFDSB: MPLS packet received on non MPLS enabled interface [chars] L3 type [hex] label {[dec] [dec] [dec]}

Explanation MPLS packets received on an interface are being dropped as the interface is not setup to handle MPLS. This message might be seen when an mpls application is disabled on a interface and should go away when the upstream neighbor has reprogrammed its cef/mpls entries.

Recommended Action If an MPLS application has just be disabled and traffic is flowing, then the message is expected and should be ignored. If the message recurs in steady state, you should monitor the network for attacks and report the occurrence to Cisco.

Error Message

```
%MPLS_TE-2-ADJ_WALK_ERR: [chars]
```

Explanation Error during bundle adjacency walk.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPLS_TE-2-BUNDLE_INSERT: [chars][chars]
```

Explanation Request for inserting a traffic engineering tunnel bundle failed.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

```
%MPLS_TE-2-UNSUPPORTED_LINK_TYPE: [chars]
```

Explanation Unsupported link type.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPLS_TE-3-CONSISTENCY: %s: %s %s %s
```

Explanation An action attempted by the traffic engineering tunnel implementation encountered an unexpected condition

Recommended Action Copy the message exactly as it appears and report it to your technical service representative.

Error Message

```
%MPLS_TE-3-LSDERROR: [chars]: [chars] [chars]
```

Explanation A traffic engineering request to the label switching database has encountered an unexpected condition.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MPLS_TE-3-MFIERROR: [chars]: [chars] [chars]
```

Explanation A traffic engineering request to the label switching database encountered an unexpected condition.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPLS_TE-3-PHYSINTFCDOWN: [chars]'s LSP interface [chars] did not come up after [int] msecs

Explanation The underlying interface for a tunnel LSP did not come up, although the tunnel itself is up.

Recommended Action Check to see if the underlying interface is physically connected.

Error Message

%MPLS_TE-3-SIGNALLERINIT: Signaller unable to %sregister RSVP %s

Explanation A message handler used by the signaller to receive events or requests from RSVP, could not be installed or removed.

Recommended Action Copy and save the message. If possible, re-start the TSP tunnel signalling process by issuing the no tag-switching tsp-tunnels command, followed by the tag-switching tsp-tunnels command. If the message continues to occur even after re-starting the signalling process several times, then contact your technical support representative for assistance.

Error Message

%MPLS_TE-3-TUNNELKILL: Tunnel removal attempt (by %s) failed for tunnel %s: %s

Explanation State associated with a TSP tunnel could not be completely removed because of an internal failure.

Recommended Action Copy and save this message. If possible, remove all local TSP tunnel state by issuing the no tag-switching tsp-tunnels command, followed by the tag-switching tsp-tunnels command. (TSP tunnels removed by the first command, should be re-signalled shortly after the second command has been issued.) If the message recurs, copy and save the message and call your technical support representative for assistance.

Error Message

%MPLS_TE-4-LSPREJECT: LSP [chars] rejected: matching passive TE tunnel [chars]

Explanation An RSVP path message for an LSP for a tunnel was rejected with a PathErr message. This error has occurred because a properly configured MPLS passive tunnel interface (one that is adminstratively up) is missing.

Recommended Action Create and properly configure an MPLS passive tunnel interface that matches the rejected LSP. Ensure that the interface is administratively up, or modify the tunnel interface configuration at the head end of the tunnel.

```
%MPLS_TE-5-FRR: [chars]
```

Explanation An informational traffic engineering tunnel trap has been generated for an MPLS fast-reroute event.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MPLS_TE-5-LSP: [chars]
```

Explanation An informational traffic engineering tunnel trap was generated for an LSP event.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MPLS_TE-5-TUN: [chars]
```

Explanation An informational traffic engineering tunnel trap was generated for a tunnel event.

%MPLS_TE_AUTOMESH-5-AUTOTEMPLATE_HWIDB_DELETE: Failed to delete hwidb for Auto-Template [dec] index [dec]

Explanation Deletion of Auto-Template interface failed.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPLS_TE_AUTO_TUN-3-LOCK_COUNT: Unexpected data structure access. %s unlocks with count %u, but expected %u (%u failure%s). MPLS_TE_AUTO_TUN_STD_CONFIRM

Explanation MPLS_TE_AUTO_TUN_STD_LOCK_EXPLANATION

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPLS_TE_AUTO_TUN-3-LOCK_DOUBLE: Unexpected data structure access. Non-zero lock count %u when %s locks (%u failure%s). MPLS_TE_AUTO_TUN_STD_CONFIRM

Explanation MPLS_TE_AUTO_TUN_STD_LOCK_EXPLANATION

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%MPLS_TE_AUTO_TUN-3-LOCK_ZERO: Unexpected data structure access. %s unlocks with count %u, but not locked (%u failure%s). MPLS_TE_AUTO_TUN_STD_CONFIRM

Explanation MPLS_TE_AUTO_TUN_STD_LOCK_EXPLANATION

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPLS_TE_AUTO_TUN-4-REMOVE_FAIL: Removing existing auto tunnels may have failed.%s%s MPLS_TE_AUTO_TUN_STD_CONFIRM Use show running-config to confirm expected configuration. Repeat CLI configuration as needed.

Explanation The MPLS Traffic Engineering Auto-Tunnel software detected a possible problem removing existing automatic tunnels. It may be necessary to repeat the CLI action that caused the removal and reconfiguration of automatic tunnels.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPLS_TE_LM-3-CONSISTENCY: [chars]: [chars] [chars] [chars]
```

Explanation An action attempted by the MPLS TE link management implementation has failed. The MPLS TE link management encountered an unexpected condition.

%MPLS_TE_LM-3-GMPLS_UNSUPPORTED_RESOURCE: GMPLS [[chars]] labels unsupported

Explanation A GMPLS LSP that is routed on a particular link is requesting a link switching type that is unsupported on this platform.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MPLS_TE_LM-3-LSP_BAD_ENCODING_TYPE: LSP [chars] requesting Encoding Type [[chars]] that is unsupported on interface [chars].

Explanation The indicated TE LSP, routed on the indicated interface, requested an Encoding Type that is unsupported on the interface. The requested value appears in the Generalized Label Request.

Recommended Action Verify that the head end originating the TE LSP has a Generalized Label Request that is specifying an Encoding Type acceptable to the interface in question. If not, alter the head end configuration to request an LSP with an appropriate value, or cause the LSP to be routed on a different interface. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPLS_TE_LM-3-LSP_BAD_ENCODING_TYPE_REQUESTED: [chars]: LSP requests encoding type unsupported or invalid

Explanation The indicated TE LSP, routed on the indicated interface, requested a Switching Type that is unsupported on the interface. The requested value appears in the Generalized Label Request.

Recommended Action Verify that the head end originating the TE LSP has a Generalized Label Request that is specifying a Switching Type acceptable to the interface in question. If not, alter the head end configuration to request an LSP with an appropriate value, or cause the LSP to be routed on a different interface. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPLS_TE_LM-3-LSP_BAD_GPID: LSP [chars] requesting G-PID [[chars]] that is unsupported on interface [chars][chars].

Explanation The indicated TE LSP, routed on the indicated interface, requested a (Generalized) Payload Identifier unsupported on the interface. The requested value appears in the Label Request/Generalized Label Request.

Recommended Action Verify that the head end originating the TE LSP has a Label Request that is specifying a PID acceptable to the interface in question. If not, one possibility is to alter the head end configuration to request an LSP with an appropriate value. Alternatively, if this error is generated at the penultimate hop of an LSP where the endpoint is advertising an implicit-null label (penultimate hop popping is in use), alter the endpoint to advertise an explicit-null label. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information. Provide the output of show tech-support and a topology diagram showing the hops in the LSP, marking each hop with the vendor/software, and identify which hop is the IOS device issuing the error message.

Error Message

%MPLS_TE_LM-3-LSP_BAD_SWITCHING_TYPE: LSP [chars] requesting Switching Type [[chars]] that is unsupported on interface [chars].

Explanation The indicated TE LSP, routed on the indicated interface, requested a Switching Type that is unsupported on the interface. The requested value appears in the Generalized Label Request.

Recommended Action Verify that the head end originating the TE LSP has a Generalized Label Request that is specifying a Switching Type acceptable to the interface in question. If not, alter the head end configuration to request an LSP with an appropriate value, or cause the LSP to be routed on a different interface. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information. Pprovide the output of **show tech-support** and a topology diagram showing the hops in the LSP, marking each hop with the vendor/software, and identify which hop is the IOS device issuing the error message.

%MPLS_TE_LM-3-LSP_BAD_SWITCHING_TYPE_REQUESTED: [chars]: LSP requests switching type [[chars]] unsupported on link [[chars]]

Explanation A GMPLS LSP routed on a particular link is requesting a link switching type (in the generalized label request) that is unsupported on the link in question.

Recommended Action Verify that the head specifies the correct link switching type in the generalized label request. If this problem still persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MPLS_TE_LM-5-CLEAR_COUNTERS: Clear MPLS TE Link Management counters by [chars]

Explanation The MPLS TE Link Management counters have been cleared.

Recommended Action No action is required.

Error Message

```
%MPLS_TE_PCALC-2-DUP_IP_ADDRESS: %s %i %s
```

Explanation Two nodes have the same stable ip address

Recommended Action Find the system that has the duplicate ip address and configure a different one.

Error Message

```
%MPLS_TE_PCALC-2-DUP_RRR_ID: %s %i %s
```

Explanation Two nodes have the same stable router id

Recommended Action Find the system that has the duplicate router id and configure a different one.

Error Message

```
%MPLS_TE_PCALC-2-INVLD_RTR_FRAGMENT: Router id ([IP_address]) received from [chars] in fragment [int], previously received in fragment [int]
```

Explanation A router ID has been received in multiple fragments.

Recommended Action Locate the problem router. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply

clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%MPLS_TE_PCALC-2-INVLD_RTR_ID: Invalid router id ([IP_address]) received from [chars] in fragment [int]
```

Explanation An invalid router LSA has been received. The LSA should not contain a Router ID of zero. The cause of this problem may be a misconfiguration, memory corruption, or unexpected behavior on a router.

Recommended Action Locate the problem router and check the configuration. To determine what is causing this problem, contact your Cisco technical support representative for assistance.

Error Message

```
%MPLS_TE_PCALC-2-MEM: %s %d
```

Explanation A failure at an attempt to alloc memory was detected

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPLS_TE_PCALC-3-INIT: pcalc_system_id_size == 0
```

Explanation An internal inconsistency was detected when an attempt was made to initialize the MPLS TE path calculation system id before the system_id size is known.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

```
%MPLS_TE_PCALC-3-LSA: %s %s
```

Explanation An internal inconsistency was detected when an attempt was made to establish handle received lsa for MPLS TE topology database.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPLS_TE_PCALC-3-PATH: %s
```

Explanation An internal inconsistency was detected when an attempt was made to establish an MPLS TE tunnel using the MPLS TE path calculation subsystem.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

MPLS_VPN_HA Messages

The following are MPLS HA messages for checkpointing label bindings.

Error Message

```
%MPLS_VPN_HA-3-CF_GEN_ERROR: [chars]
```

Explanation MPLS VPN HA client CF related general error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

%MPLS_VPN_HA-3-CLIENTREG: [chars]

Explanation The MPLS VPN HA facility could not be registered to the CF.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MPLS_VPN_HA-3-DBOPERATION: [chars] RD [chars], [IP_address]/[dec], label [dec]

Explanation MPLS VPN HA Checkpoint database operation error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MPLS_VPN_HA-3-SIZEMISMATCH: Label table size ([dec]) mismatch, get label tableid failed.

Explanation A mismatch has been detected in the table size of the MPLS VPN HA facility.

%MPLS_VPN_HA-7-LABELFREE: [chars] [dec]

Explanation The MPLS VPN label manager failed to free a label.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MPLS_VPN_HA-7-MALLOCFAIL: [chars]

Explanation The MPLS VPN HA facility failed to allocate memory.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MPLS_VPN_HA-7-XMITFAIL: [chars], message seq no [dec], current seq no [dec]

Explanation The MPLS VPN label manager has failed to deliver a message.

```
%MPLS_VPN_ISSU-3-CF_ERR: [chars] [hex]
```

Explanation MPLS VPN ISSU client CF related error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPLS_VPN_ISSU-3-GENERR: [chars]
```

Explanation MPLS VPN ISSU client general error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPLS_VPN_ISSU-3-ISSU_RC_ERR: [chars] [chars]
```

Explanation MPLS VPN ISSU client ISSU infra related error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

MPOA Messages

Error Message

%MPOA-3-MPC_ERROR: %s

Explanation A software error has occurred in the multiprotocol-over-ATM client (MPC) software.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MPOA-3-MPOA_ERROR: %s

Explanation A software error has occurred in the multiprotocol-over-ATM subsystem.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MPOA-3-MPS_ERROR: %s

Explanation A software error has occurred in the multiprotocol-over-ATM server (MPS) software.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

```
%MPOA-4-MPC_WARNING: %s
```

Explanation This is a non-fatal warning from the multiprotocol-over-ATM client (MPC) software, probably the result of an incorrect configuration or operator command. Details about the warning are included in the message.

Recommended Action Try to determine if a configuration or operator error has caused this warning. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPOA-4-MPS_WARNING: %s
```

Explanation This is a non-fatal warning from the multiprotocol-over-ATM server (MPS) software, probably the result of an incorrect configuration or operator command. Another possible but less likely cause could be an internal software error.

Recommended Action Try to determine if a configuration or operator error has caused this warning. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MPOA-5-UPDOWN: %s
```

Explanation A multiprotocol-over-ATM entity was brought up or down. This is only a status message.

Recommended Action No action is required.

Error Message

```
%MPOA-6-MPC_INFORMATION: %s
```

Explanation This is a multiprotocol-over-ATM client (MPC) status/information message

Recommended Action No action is required.

```
%MPOA-6-MPS_INFORMATION: %s
```

Explanation This is a multiprotocol-over-ATM server (MPS) status/information message

Recommended Action No action is required.

MRIB Messages

The following are Multicast Routing Information Base (MRIB) messages.

Error Message

```
%MRIB-2-NOMEMORY: No memory for [chars] in [chars]
```

Explanation The requested operation could not be accomplished because of low memory.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

```
%MRIB-3-GENCOMMERR: Communication error: [chars] [chars]
```

Explanation A IPC error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MRIB-3-GENINITFAIL: Initialization failed: [chars] [chars]
```

Explanation An unrecoverable error occurred at system initialization time.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%MRIB-3-INTERNALERR: Internal error: [chars] in [chars] line [dec] ([chars])
```

Explanation An internal software error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MRIB-3-REDUCEDFUNCT: Initialization of '[chars]' functionality failed
```

Explanation The initialization of the specified functionality has failed because of low memory. The component might still operate without the functionality.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

```
%MRIB-4-DEBUGERR: Debugging error: [chars] in [chars] line [dec] ([chars])
```

Explanation An error related to the debugging subsystem has occurred.

%MRIB-4-FILTRVIOLERR: Filter violation error: conn [dec] ([chars]:[chars]) in [chars]

Explanation A client has tried to modify a route attribute that was not owned by the client.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MRIB-4-INCORRECTPARS: Illegal parameter in function call ([chars]) in [chars]
```

Explanation An externally accessible function has been called with illegal parameters. The parameters have been recast to acceptable values.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MRIB-4-NOMEMORYW: No memory for [chars] in [chars]. Handling: [chars]
```

Explanation The requested operation could not be accomplished because of low memory, but the problem has been handled locally.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

```
%MRIB_API-3-ASYNC_ERR: Asynchronous error: [chars]
```

Explanation An unhandled asynchromous error has occurred in the MRIB API.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MRIB_API-3-CORRPT: Corrupted update: [chars]
```

Explanation A corrupted update has been received from the MRIB by the MRIB API.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MRIB_API-3-REG_FAIL: Server unexpected error: [chars]
```

Explanation An internal error has occurred in a registry call from the MRIB API.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs. MRIB_PROXY Messages

Recommended Action The following are Multicast Routing Information Base (MRIB) proxy messages.

%MRIB_API-7-ASYNC_WAR: Warning: [chars]

Explanation A recoverable error condition has occurred in the MRIB API.

Recommended Action No action is required.

Error Message

y $MRIB_PROXY-2-MRIB_LC_CONNECT_FAIL$: The linecard could not connect to the RP proxy: [chars]

Explanation The line card failed to make a connection to the MRIB proxy on the RP. The MFIB will not be started on this line card.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

 $MRIB_PROXY-2-MRIB_LC_CREPRC_FAILED: LC in slot [dec] failed to create a required process.$

Explanation The line card could not create a process to perform delayed IPC initialization. The MFIB will not be started on this line card.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MRIB_PROXY-2-MRIB_LC_FAILED_GET_IPC: LC failed allocating IPC buffer which may lead to data loss or inconsistent MFIB states, slot = [dec]

Explanation The line card has failed in allocating an interprocessor communication buffer.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

%MRIB_PROXY-2-MRIB_LC_FAILED_IDB_MAP: LC failed in mapping interface number [dec]

Explanation The line card failed to map an interface from the global representation to a local representation.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MRIB_PROXY-2-MRIB_LC_FAILED_IPC_ACK: RP failed in getting Ack for IPC message of type = [dec], status = [dec], error = [chars]
```

Explanation The route processor failed to obtain IPC acknowledgment.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MRIB_PROXY-2-MRIB_LC_FAILED_IPC_OPEN: LC in slot [dec] failed to open IPC port to RP, error = [chars]
```

Explanation The line card failed to open an IPC port toward the route processor.

%MRIB_PROXY-2-MRIB_LC_FAILED_SEND_LC_READY: LC in slot [dec] failed to send LC ready to RP, error = [chars]

Explanation The line card failed to send a Ready message to the route processor.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MRIB_PROXY-2-MRIB_LC_FETCH_FAIL: LC in slot [dec] failed to send an RPC fetch request to the RP : [chars]

Explanation The line card attempted to read mroute updates from the route processor but the RPC request failed. The line card MFIB state might now be inconsistent or frozen.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MRIB_PROXY-2-MRIB_LC_READY_NOIPC: LC failed allocating IPC buffer to send LC ready, slot = [dec]

Explanation The line card has failed to allocate an interprocessor communication buffer in order to send the Ready message.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

%MRIB_PROXY-2-MRIB_RP_FAILED_GET_IPC: RP failed allocating IPC buffer which may lead to data loss or inconsistent MFIB states

Explanation The route processor failed to allocate an interprocessor communication buffer.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MRIB_PROXY-2-MRIB_RP_FAILED_IDB_MAP: RP failed in mapping interface
```

Explanation The route processor failed to map an interface from the global representation to the local representation, or from the local representation to the global representation.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MRIB_PROXY-2-MRIB_RP_FAILED_IPC_ACK: LC failed in getting Ack for IPC message of type = [dec], status = [dec], error = [chars]
```

Explanation The line card has failed to obtain an IPC acknowledgment.

%MRIB_PROXY-2-MRIB_RP_FAILED_IPC_CREATE: RP failed in creating IPC port, error =
[chars]

Explanation The route processor failed to create an MFIB IPC port.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MRIB_PROXY-2-MRIB_RP_FAILED_LC_DIST_MODE_INIT_PROC: RP failed in creating distribute mode init process for a linecard, slot = [dec]

Explanation The route processor failed to create a distributed mode initialization process for a line card.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MRIB_PROXY-2-MRIB_RP_FAILED_LC_PORT_INFO: RP failed in creating linecard port info for distributed mode, slot = [dec]

Explanation The route processor failed to create line card port information for distributed mode operation.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%MRIB_PROXY-2-MRIB_RP_FAILED_LC_PORT_OPEN: RP failed in opening linecard port info for distributed mode, slot = [dec]

Explanation The route processor failed to obtain line card port information for distributed mode operation.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MRIB_PROXY-2-MRIB_RP_FAILED_RPC_REPLY: RP failed in sending [chars] reply to a linecard in slot = [dec], IPC error = [chars]. This is normal after linecard removal or reset. At other times, data loss or mroute state inconsistency may result.

Explanation The route processor failed to send a remote procedure call reply to a line card. This condition is normal after a line card has been removed or reset. At other times, data loss or multicast route state inconsistency may result.

%MRIB_PROXY-2-MRIB_RP_INIT_FAIL: The RP proxy process failed to initialize: [chars]

Explanation The MRIB RP proxy failed to initialized correctly. This will prevent the MFIB from starting on line cards.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

MROUTE Messages

Error Message

%MROUTE-2-RADIXINIT: Error initializing IP multicast radix for %i

Explanation Insufficient memory is available to initialize the IP multicast routing table.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MROUTE-3-IGMP_NOT_FOUND: IGMP group [IP_address] to delete from interface [chars] not found in VRF [chars]

Explanation The group to be deleted from the interface could not be found in the IGMP cache for the VRF.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

%MROUTE-3-IGMP_TWHEEL_INIT_ERR: Error trying to initialize the IGMP timer wheel

Explanation An error occured intializing a timer twheel

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MROUTE-3-IGMP_WAVL_ERROR: IGMP wavl [chars] failed for group [IP_address] in interface [chars]

Explanation The addition or deletion of an IGMP group in the WAVL tree failed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MROUTE-3-MIDB_QUEUE_ERR: Interface [chars] not in ([IP_address], [IP_address])
```

Explanation An error in maintaining the multicast route table has occurred. The MIDB has the highest expiration timer, but the specified interface is not in the MDB and MIDB, respectively, as specified in the error message.

%MROUTE-3-NO_PIM_NBR: There is no PIM neighbor on this IDB: [chars]

Explanation There is no PIM neighbor on the specified IDB. The most probable cause of this error is that PIM is not configured correctly on this interface or on interfaces of the next-hop routers.

Recommended Action Check PIM configurations on local and neighbor routers. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MROUTE-3-RECUR_ROUTE_DEPTH_ERR: Recursive route lookup has reached its max depth for: [IP_address]

Explanation The recursive route lookup has reached its predefined maximum depth limit.

Recommended Action If possible, reduce the number of rounds of next-hop lookup needed for the network address in question. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MROUTE-3-ROUTECOUNT_ERR: Running multicast route count [int]

Explanation This system message was created as a troubleshooting aid to capture an unlikely internal software error. The condition that caused this message should not be seen in current Cisco IOS software releases and should not impact system performance.

Recommended Action If this message was seen after you entered the show ip mroute command, use the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl to search for the message and upgrade the Cisco IOS software based on the release in which the fix was integrated. If, after the upgrade, this message recurs and there is still a performance problem, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support

representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show version and show running-config commands and your pertinent troubleshooting logs.

%MROUTE-3-ROUTECOUNT_ZERO: Multicast route count reached zero

Explanation The running count of multicast routes reached zero when it should be non-zero.

Recommended Action An error in maintaining the multicast route count occurred. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MROUTE-3-TWHEEL_DELAY_ERR: Exceeded maximum delay ([dec] ms) requested: [dec]

Explanation An error in maintaining the timer wheel has occurred. The timer wheel has a maximum delay defined. If a function is scheduled with a higher delay, the system still schedules it using the defined maximum delay.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MROUTE-3-TWHEEL_ERR: Timer wheel internal error

Explanation An internal software error involving the timer wheel has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%MROUTE-3-TWHEEL_INIT_ERR: Trying to re-initialize an already initialized timer wheel

Explanation An error occurred while a timer wheel was being initialized.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

 $MROUTE-3-TWHEEL_INSERT_ERR:$ An error occured after inserting or executing a timer wheel event

Explanation An error occurred after inserting or executing a timer wheel event.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MROUTE-3-TWHEEL_INT_ERR: Timer wheel error at interrupt level [dec]

Explanation An internal error involving timer wheel maintenance has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%MROUTE-3-TWHEEL_SLOT_ERR: Timer wheel event: [hex] slot: [dec] func: [hex] unequal to exec slot: [dec]

Explanation A timer wheel event contains an inconsistent slot number.

Recommended Action Enter the clear ip mroute * command. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MROUTE-3-WAVLINIT: Could not initialize WAVL tree for ([IP_address], [IP_address])
```

Explanation The wavelength tree could not be initialized and consequently the system cannot search for MIDBs. The MDB will be discarded.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs. MSC100_SPA_CC Messages

Recommended Action The following are 7304 SPA Carrier Card messages.

Error Message

%MROUTE-4-MROUTELIMIT: Exceeded multicast limit for group [IP_address], source [IP_address] on interface [chars]

Explanation The allowed number of multicast routes having the incoming or outgoing interface reached the limit specified by a configured access-list. New routes cannot be added unless the interface configuration is changed.

Recommended Action If multicast traffic over the interface is of any priority among the traffic carried by this router, then enter the ip multicast limit interface command to increase the number of multicast routes. Otherwise, no action is required. Enter the debug ip mroute limit and/or show ip multicast limit command to determine exactly which multicast interface limit was exceeded.

%MROUTE-4-MTU_MISMATCH: WARNING: With IP multicast enabled, interfaces which transmit traffic from larger to smaller MTU interfaces may not be hardware switched due to fragmentation. A degradation in performance may occur.

Explanation This warning message provides information about transmitting traffic from larger to smaller MTU interfaces.

Recommended Action Set MTU values on all interfaces to be identical to avoid fragmentation.

Error Message

MROUTE-4-RADIXDELETE: Error trying to delete multicast route entry %i/%d for %i (expected %#x, got %#x)

Explanation An error in the multicast routing table occurred. A route could not be deleted from the routing table.

Recommended Action Execute a clear ip mroute command. Determine whether the router is low on memory. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

MROUTE-4-RADIXINSERT: Error trying to add multicast route entry %i/%d for %i (expected %#x, got %#x)

Explanation An error in the multicast routing table occurred. A route could not be inserted in to the routing table.

Recommended Action Execute a clear ip mroute command. Determine whether the router is low on memory. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%MROUTE-4-REGISTER_SOURCE_CONFIG: Removing pim register source configuration for [chars] from vrf [chars]

Explanation The register source interface was deleted, had its IP address removed, or its vrf forwarding changed.

Recommended Action No action required, just check 'ip pim register-source' configuration.

Error Message

%MROUTE-4-ROUTELIMIT: [int] routes exceeded multicast route-limit of [dec] - VRF [chars]

Explanation The number of multicast routes exceeds the configured maximum number. New routes cannot be added unless the configuration is changed.

Recommended Action If multicast traffic is is set to any priority among the traffic carried by this router, enter the **ip multicast route-limit** command to increase the number of multicast routes. Otherwise, no action is required.

Error Message

%MROUTE-4-ROUTELIMITWARNING: multicast route-limit warning (curr [int] threshold [int]) - VRF [chars]

Explanation The number of multicast routes has reached the warning level.

Recommended Action Consider increasing the multicast route limit.

Error Message

%MROUTE-4-ROUTELIMIT_ATTEMPT: Attempt to exceed multicast route-limit of [dec]

Explanation The number of multicast routes equals the configured maximum allowed. New routes cannot be added unless the configuration is changed.

Recommended Action If multicast traffic is of any priority among the traffic carried by this router, then enter the **ip multicast route-limit** command to increase the number of multicast routes. Otherwise, no action is required.

Error Message

%MROUTE-4-RPF_LOOKUP_LOOP: RPF route lookup loop for %i, route %i/%d

Explanation Possible routing loop caused by routers RPFing to different tables

Recommended Action Check routing tables used for RPF.

%MROUTE-6-LARGE_TWHEEL_DELAY: Exceeded maximum delay ([dec] ms) requested: [dec]

Explanation A timer with a large delay has been requested. There is a maximum delay defined for the timer wheel. A function with a higher delay than the maximum delay has been scheduled. If a function with a higher delay is scheduled, it will be scheduled using the maximum possible delay minus a small delay offset.

Recommended Action Determine if a large IGMP query interval is set. Some timers can refresh periodically to allow for the large delay. No action is required.

Error Message

%MROUTE-6-UNSUPPORTED_SAP_FORMAT: Received unsupported format SAP message from ([IP_address])

Explanation Received compressed payload SAP message.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying

information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MR_MGR-6-CONFIG_CHANGE_NOT_ALLOWED: [chars]
```

Explanation Following protocol combinations are allowed for co-existence PVST & DVRP & SVRP & SVRP

Recommended Action Limit co-existence to supported combinations. MROUTE Messages

Recommended Action The following are Multicast Route messages.

Error Message

```
%MSACDSPRM-3-DSPKALERROR: [Slot:[dec]/DSP :[dec]] DSP Keep-Alive Failure
```

Explanation Lost communication to the DSP.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%MSACDSPRM-3-DSPMAGICERROR: [Slot:[dec]/DSP :[dec]] DSP Failed Magic Number check

Explanation DSP image does not have the correct valid magic number .

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MSACDSPRM-3-DSP_HOST_RX_OVERFLOW: DSP to Host Rx Overflow detected for ACT slot [dec].

Explanation Error in receiving direction from DSP to Host.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MSACDSPRM-3-MII_HOST_RX_OVERFLOW: Mii to Host Rx Overflow detected for ACT slot [dec].

Explanation Error in receiving direction from Mii interface to Host.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MSACDSPRM-6-ACT_DSPS_ONLINE: DSP Conferencing Resources are ready.

Explanation DSP's on the ACT cards online diagnostics is completed.

Recommended Action No action is required.

MSB Messages

Error Message

%MSB-5-MSB_NTP: Could not update clock on Multi-Service module [dec], rc is [dec]

Explanation Either the line card or the Cisco IOS software encountered some problems while sending a clock update from IOS to the line card.

Recommended Action In this message recurs, reset the Multi-Service module. If resetting the module does not solve the problem, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

Error Message

%MSB-5-MSB_SCP: Multi-Service module SCP communication failed for module [dec], subopcode is [dec]

Explanation Either the line card or the Cisco IOS software encountered some problems while communicating through SCP channels.

Recommended Action If this message recurs, reset the Multi-Service module. If resetting the module does not solve the problem, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

MSC100_SPA_CC Messages

The following are Cisco 7304 SPA carrier card messages.

```
%MSC100_SPA_CC-0-FPGA_BAY_ERROR_EXCEED_LIMIT: [chars] detected [chars] exceed limit ([dec]) (hardware-status = [hex])
```

Explanation Critical FPGA error was detected on the spa or carrier card for the specified subslot. The spa in this subslot has been disabled since the error was deemed critical.

Recommended Action Try to reactivate the card by entering the **hw-module subslot&**#160; **start** command. If this message recurs, enter the **show diag** command to gather data that might help identify the nature of the message. If you cannot determine the nature of the message from the error message text or from the **show diag** command output, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MSC100_SPA_CC-0-FPGA_ERROR: [chars] Slot [dec]: Hardware error detected [[chars]]
```

Explanation A critical FPGA error has been detected on the SPA carrier card in the specified slot. The carrier card has been disabled.

Recommended Action Attempt to reactivate the line card using the hw-module slot slot-number start command, with slot-number being the slot number of the affected line card. If the error persists, copy the error message exactly as it appears on the console or in the system log. Enter the show diag slot-number command, with slot-number being the slot number of the affected line card, to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from other command output, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%MSC100_SPA_CC-0-FPGA_ERROR_EXCEED_LIMIT: [chars] Slot [dec] detected [chars] exceed limit ([dec]) (hardware-status = [hex])
```

Explanation Critical FPGA error was detected on the carrier card. The carrier card is deactivated and then an automatic recovery is initiated. If similar error occurs more than five times within an hour, the carrier card is deactivated.

Recommended Action If the line card is no longer automatically reactivating, copy the message exactly as it appears on the console or in the system log. Enter the **show diag** command to gather data that might help identify the nature of the message. If you cannot determine the nature of the message from the error message text or from the **show diag** command output, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue

using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MSC100_SPA_CC-0-MISSING_RP_FPGA_SUPPORT: The 7304-MSC-100 in slot [int] has been deactivated because the RP FPGA requires an upgrade.

Explanation The MSC-100 SPA carrier card in the specified slot requires a particular version of the RP FPGA. The MSC-100 will be deactivated until this FPGA incompatibility is addressed.

Recommended Action Enter the **upgrade fpga all** command to upgrade the RP FPGA. After upgrading the RP FPGA, reactivate the MSC-100 by removing and reinserting the MSC-100.

MSDP Messages

The following are Multicast Source Discovery Protocol messages.

Error Message

%MSDP-4-PKT_TOO_BIG: Message size violation on %u-byte packet from %i, discarded

Explanation A message larger than the maximum MSDP message size was received. There is also a possibilty that this is an internal error.

Recommended Action Find the manufacturer and the version information of the router which sent this packet. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the commands and your pertinent troubleshooting logs. (show version)

Error Message

%MSDP-4-SA_LIMIT: SA from peer %i, RP %i for (%i, %i) exceeded sa-limit of %d

Explanation The number of MSDP SAs exceeds the configured maximum number. SA cache entries cannot be added unless the configuration is changed.

Recommended Action If MSDP SAs come from legitimate sources/RPs, then use the 'ip msdp sa-limit' command to increase the number of SA entries allowed from the subject peer. Otherwise no action is required.

%MSDP-5-PEER_IS_SELF: Peering with self ([IP_address])

Explanation The MSDP process is attempting to peer with itself.

Recommended Action Check the address of the MSDP peer. MSFC2 Messages

Recommended Action The following are Multilayer Switch Feature Card 2 messages.

Error Message

%MSDP-5-PEER_UPDOWN: Session to peer %i going %s

Explanation Session to peer going up or down

Recommended Action Determine whether the router is low on memory.

MSDSPRM Messages

Error Message

%MSDSPRM-3-DSPCRASH: slot [dec] dspId [dec] heartBeat [hex] heartBeatError [dec]

Explanation DSP crashed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MSDSPRM-3-NO_EVENTMEM: MS DSPRM out of event buffers; [chars] [chars]

Explanation One or more processes in MS DSPRM have exhausted event messages.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

```
%MSDSPRM-6-BADSLOT: Invalid slot# [dec]; [chars]
```

Explanation The slot number entered is invalid.

Recommended Action No action is required.

Error Message

```
%MSDSPRM-6-BOOTCODE: [[dec]/[dec]] Abnormal bootcode [hex]
```

Explanation DSP indicated error.

Recommended Action No action is required.

Error Message

```
%MSDSPRM-6-DSPALARM: [[dec]/[dec]] DSPCore error received (errcode [hex])
```

Explanation DSP indicated a fatal error.

Recommended Action No action is required.

Error Message

```
%MSDSPRM-6-DSPERROR: [[dec]/[dec]-[dec]] DSPCore error detected - code [hex]-[hex]
```

Explanation DSP encountered a fatal error.

Recommended Action No action is required.

Error Message

```
%MSDSPRM-6-ERROR: [chars]
```

Explanation Error encountered.

Recommended Action No action is required.

Error Message

```
%MSDSPRM-6-OUTOFMSG: Could not get msg from ms_dsprm_msg_queue
```

Explanation An event could not be processed due to message bufferexhaustion. This is a temporary condition.

Recommended Action No action is required.

MSFC2 Messages

Error Message

%MSFC2-3-INBAND_BAD_PAK: Possibly un-encapsulated packet passed to Mistral: int [chars], type [int], stat [hex], flags [hex], size [dec], offset [dec], total [int]

Explanation A badly encapsulated packet has been received from the process level.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MSFC2-3-INBAND_INVALID_IBL_FILL: Attempting to issue IBL Fill when IBL is void of packet

Explanation An invalid IBL cannot issue an IBL Fill.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MSFC2-3-MISTRAL_BAD_PAK: Possibly un-encapsulated packet passed to Mistral: int [chars], type [int], stat [hex], flags [hex], size [dec], offset [dec], total [int]

Explanation A packet that is badly encapsulated has been received from the process level.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%MSFC2-3-MISTRAL_BUSY: Mistral could not finish [chars] operation in time

Explanation The Mistral ASIC did not complete its operation within the configured time.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MSFC2-3-MISTRAL_INVALID_IBL_FILL: Attempting to issue IBL Fill when IBL is void of packet

Explanation An invalid IBL Fill operation has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MSFC2-3-NOT_IDLE: Receive path not idle after reset

Explanation The receive hardware is not idle after it has been reset.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%MSFC2-3-NO_GIG_SYNC: Inband Gig interface not syncronized, status [hex]

Explanation The hardware for transmitting packets to and receiving packets from the router is not functioning properly.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MSFC2-3-NO_MISTRAL_INIT_STATUS: Mistral ASIC init status of 0xf not obtained, status [hex]

Explanation The Mistral ASIC initialization status could not be properly obtained.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MSFC2-3-NO_OBL_TO_INBAND: The System Controller OBL to INBAND semaphore not obtained

Explanation The system controller OBL-to-inband semaphore could not be properly obtained.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at

http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%MSFC2-3-NO_SYSTEM_CONTROLLER_INIT_STATUS: The System Controller init status of 0xf not obtained, status [hex]

Explanation The system controller initialization status could not be properly obtained.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MSFC2-3-SYSTEM_CONTROLLER_BUSY: The System Controller could not finish [chars] operation in time

Explanation The system controller has failed to complete its operation.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

MSFC2-3-TOOBIG: Attempt to send giant packet on [chars] ([dec] bytes from [hex], max allowed [dec])

Explanation An attempt has been made to send an oversized packet.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance,

open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

MSFW Messages

Error Message

%MSFW-6-DNLDERR: [chars]

Explanation DSP core failed to boot.

Recommended Action No action is required.

Error Message

%MSFW-6-DOWNLOAD_FAILED: [[chars]] DSP core firmware download failure

Explanation DSP failed to download firmware - disabled.

Recommended Action No action is required.

Error Message

```
%MSFW-6-DSPBAD: [[dec]/[dec]] BAD dspcore
```

Explanation The specified DSP has failed multiple times and is disabled.

Recommended Action No action is required.

Error Message

```
%MSFW-6-DSPBRINGUP: Slot [dec] DSPs are being brought up ...
```

Explanation DSP on the specified board are being booted.

Recommended Action No action is required.

Error Message

```
%MSFW-6-DSPMAGICFAILED: [[dec]/[dec]] Magic check failed ([dec])
```

Explanation DSP core failed to boot.

Recommended Action No action is required.

%MSFW-6-DSPNORESTARTIND: [[dec]/[dec]] No restart indication from dspcore ([dec])

Explanation DSP core failed to boot.

Recommended Action No action is required.

Error Message

```
%MSFW-6-DSPRECOVERED: [[dec]/[dec]] Dspcore recovered ([dec])
```

Explanation The specified DSP has been recovered by downloading firmware.

Recommended Action No action is required.

Error Message

```
%MSFW-6-DSPUP: Slot [dec] DSPs are UP
```

Explanation DSPs on the specificed slot are booted.

Recommended Action No action is required.

MSG802 Messages

Error Message

%MSG802-3-ADAPTER_LIMIT_EXCEEDED: Configuration for adapter [dec] [enet] rejected ([chars])

Explanation An attempt was made to configure more than 18 CSNA adapters. A maximum of 18 CSNA adapters is allowed per CIP.

Recommended Action To comply with the 18 CSNA adapter limit, reduce the number of CSNA adapters configured.

Error Message

```
%MSG802-3-HARD_ERROR: [chars]
```

Explanation The protocol stack has encountered error conditions that prevent it from continuing its normal operations. An error checking condition may have occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

%MSG802-3-INVALID_CFGCMD: invalid config cmd detected cmd=[dec]

Explanation The LLC task has detected an invalid configuration command. The command is rejected.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MSG802-3-INVALID_MSICMD: invalid msi cmd detected cmd=[dec]
```

Explanation The LLC task has detected an invalid MSI command. The request is discarded.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MSG802-3-INVALID_VCN1: LAN not configured for vcn=[dec], adapter=[dec], lan=[dec], ran=[dec] - cfg cmd rejected ([chars])
```

Explanation An attempt to process the specified configuration command has failed because an invalid VCN was detected. The configuration command is rejected.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
MSG802-3-INVALID_VCN2: LAN has configured for vcn=[dec], adapter=[dec], lan=[dec], ran=[dec] - cfg cmd rejected ([chars])
```

Explanation An attempt to process the specified configuration command has failed because an invalid VCN was detected. The configuration command is rejected.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

```
%MSG802-3-QUEUE_OPEN: [chars] ([chars])
```

Explanation The LLC task has detected a queue-open failure. The resource may not be available for this request.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MSG802-3-RESOURCE_DEPLETED: [chars] ([chars])
```

Explanation The protocol stack has encountered error conditions that prevent it from continuing its normal operations. Possible errors include resource depletion.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MSG802-3-UNKNOWN_EVENT: detect unknown event; event=[dec]
```

Explanation The LLC task has detected an unknown event.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MSG802-3-UNSUPPORTED: [chars] ([chars])
```

Explanation The LLC task has detected a request for an unsupported function. The request will be ignored.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MSG802-6-ADAPTER_OPEN: Adapter [chars]/[int] now open
```

Explanation Operability for the specified adapters that were brought up has been confirmed.

Recommended Action No action is required.

%MSG802-6-ADAPTER_REM: Adapter [chars]/[int] now removed

Explanation The removal of each of the specified adapters has been confirmed.

Recommended Action No action is required.

Error Message

%MSG802-6-ADAPTER_UPD: Adapter [chars]/[int] LLC parm now altered

Explanation The changed LLC parameters for each of the specified adapters has been confirmed.

Recommended Action No action is required.

Error Message

%MSG802-6-BADNS_WARN: INVALID NS detected [dec] times; tuning of LLC parameter may be needed !!!

Explanation The LLC protocol stack has received a bad frame that contains an Invalid NS message from its peer. Incorrectly configured LLC parameters may have occurred.

Recommended Action Reconfigure the LLC parameters of the CIP adapter and the peer.

Error Message

%MSG802-6-CTASET_FAIL: set cta max_conn [dec] failed ([dec] bytes free) - max conn remain at [dec]

Explanation In its current configuration, the CTA mapper for CSNA cannot accept the maximum number of connections because of insufficient memory. Any attempt to decrease the maximum number of connections will be rejected.

Recommended Action CSNA should be run on a CIP card with at least 32 MB of memory. Refer to the CIP CSNA configuration guide to determine the memory requirements for the maximum number of connections configured. Check the router configuration in the virtual interface of the CIP (x/2) MAX_LLC_CONNECTIONS parameter. Determine whether the device has been over configured. If over configuring the device is not the problem, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%MSG802-6-DMA_ABORT: DMA message consists of [dec] fragments with length of [dec]

Explanation The specified DLU send request has been aborted because it contained too many fragments or the fragments were too long.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

%MSG802-6-FLOW_OFF_COUNT: On [int], Off30 [int], total [int], max off time [int] ms

Explanation This message provides statistics about flowed-off connections and may be preceded by a CTA-0-INACTIVE message.

Recommended Action No action is required.

Error Message

```
%MSG802-6-FLOW_OFF_INFO: Ran [hex], Ucep [hex], Pcep [hex], [int] ms, ccb [hex]
```

Explanation This message provides statistics about flowed-off connections and may be preceded by a CTA-0-INACTIVE message.

Recommended Action No action is required.

Error Message

```
%MSG802-6-FLOW_OFF_TERM: Terminating connection, RMAC=[hex].[hex].[hex] LMAC=[hex].[hex].[hex] LSAP=[hex]
```

Explanation A connection has been terminated.

Recommended Action No action is required.

Error Message

```
%MSG802-6-FRAMESZ_EXCEEDED: frame exceeded max size ([dec] bytes)
```

Explanation The MEMD buffer currently supports a maximum frame size of 4472 bytes. CSNA has detected that the specified frame exceeded the maximum size. The frame has been discarded.

Recommended Action Check the maximum frame length configured for the MEMD buffer.

Error Message

```
%MSG802-6-INVALID_ID: [chars]: invalid id type = [hex]
```

Explanation The LLC has received an invalid ID type that is not supported. The request is discarded.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

```
%MSG802-6-INVALID_PRIMITIVE: [chars]: invalid primitive code = [hex]
```

Explanation The LLC has received an invalid service primitive code. The error message will provide the service primitive code and identify the module and routine that had received it. This is not a fatal error, and the CSNA will continue to operate.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MSG802-6-LLC_DUP_CCB: LLC Station : RMAC=[hex].[hex].[hex] LMAC=[hex].[hex] LSAP=[hex] RSAP=[hex]
```

Explanation A request to open station has been received for a station address that already is open.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MSG802-6-LLC_DUP_SAP: LLC Duplicate SAP on interface [int] : SAP=[hex], new user([hex],[hex]) old user([hex],[hex])
```

Explanation The specified remote SAP has been opened by more than one XCA major node. The pair of values that follow old and new user in the message text are the USAP that identified the XCA major node that attempted to activate the MTU that was already in use.

Recommended Action Check the XCA node definitions.

Error Message

```
%MSG802-6-LLC_SHUT: LLC shutdown completed
```

Explanation The LLC has been shut down. The LLC DMA READ/WRITE task and the TIMER task have been shut down.

Recommended Action No action is required.

Error Message

```
%MSG802-6-LLC_START: Starting LLC-2 with a session capacity of [int]
```

Explanation The LLC subsystem has been brought up.

Recommended Action No action is required.

%MSG802-6-MAX_FAILED: change max conn [dec] failed ([dec] bytes free) - max conn remain at [dec]

Explanation In its current configuration, the CTA mapper for CSNA cannot accept the maximum number of connections because of insufficient memory. Any attempt to decrease the maximum number of connections will be rejected.

Recommended Action CSNA should be run on a CIP card with at least 32 MB of memory. Refer to the CIP CSNA configuration guide to determine the memory requirements for the maximum number of connections configured. Check the router configuration in the virtual interface of the CIP (x/2) MAX_LLC_CONNECTIONS parameter. Determine whether the device has been overconfigured. If the device has not been overconfigured, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%MSG802-6-MAX_FAILED2: cipmsg pool empty - max conn remain at [dec]
```

Explanation The CIP was not able to provide the maximum number of connections there were configured because it is unable to allocate a message buffer from the Multipath message pool.

Recommended Action Retry the max_llc command. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%MSG802-6-MAX_LLC_EXCEEDED: MAX_LLC_SESSIONS([int]) exceeded - [int] sessions rejected.

Explanation The maximum number of concurrent LLC connections has been exceeded.

Recommended Action Increase the MAX_LLC_SESSIONS parameter on the CIP virtual interface.

Error Message

```
%MSG802-6-NOMEM: Insufficient memory to initialize LLC - [chars]
```

Explanation The channel adapter does not have sufficient memory to initialize the LLC stack. The LLC stack will not be started.

Recommended Action Verify the amount of memory installed on the channel adapter and upgrade if necessary.

%MSG802-6-SHRINK_CONN: reducing max_conn doesn't take effect until the virtual interface is restarted - max conn remain at [dec]

Explanation An attempt has been made to reduce the maximum connection limit. This release of Cisco IOS software does not allow you to reduce the maximum connection limit.

Recommended Action No action is required.

Error Message

```
%MSG802-6-SHUT_IN_PROG: shutdown in progress ... [chars] command rejected
```

Explanation The LLC has entered a shutdown cleanup state. All configuration commands will be rejected.

Recommended Action Retry the command when the LLC has returned to an operational state.

Error Message

```
%MSG802-6-START802_FAILED: unable to start 802 for [dec] connections - Memory Avail = [dec] bytes ([chars])
```

Explanation The CIP cannot bring up the CTA 802 task because of insufficient memory.

Recommended Action Check the maximum number of connections configured to see if CIP is overconfigured. If the Multipath is not overconfigured, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

MSG802-6-THRESHOLD: Connection threshold is set to accept maximum [dec] connections

Explanation The CSNA is currently configured to accept the maximum number of connections per user command.

Recommended Action No action is required.

MSG_POS_OC3_OC12_SPA Messages

Error Message

%MSG_POS_OC3_OC12_SPA-3-AUXC2W_INIT: [chars] (slot [dec]; bay [dec]) Device Auxiliary C2W initialization failed.

Explanation Auxiliary C2W bus initialization failed. It indicates a hardware failure.

Recommended Action Change the hardware or copy the error message exactly as it appears, and report it to your technical support representative.

%MSG_POS_OC3_OC12_SPA-3-DS1844_INIT: [chars] (slot [dec]; bay [dec]) Device DS1844 initialization failed.

Explanation DS1844 potentiometer initialization failed. It indicates a hardware failure

Recommended Action Change the hardware or copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

%MSG_POS_OC3_OC12_SPA-3-FRAMER_CREATE: [chars] (slot [dec]; bay [dec]) Device Framer creation failed.

Explanation Framer device creation failed.

Recommended Action Change the hardware or copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

%MSG_POS_OC3_OC12_SPA-3-FRAMER_INIT: [chars] (slot [dec]; bay [dec]) Device Framer initialization failed.

Explanation Framer device initialization failed. It indicates a hardware failure.

Recommended Action Change the hardware or copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

%MSG_POS_OC3_OC12_SPA-3-IOFPGA_CREATE: [chars] (slot [dec]; bay [dec]) Device IOFPGA creation failed.

Explanation IOFPGA Device creation failed.

Recommended Action Change the hardware or copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

%MSG_POS_OC3_OC12_SPA-3-IOFPGA_INIT: [chars] (slot [dec]; bay [dec]) Device IOFPGA initialization failed.

Explanation IOFPGA Device initialization failed. It indicates FPGA associated PLL lock or interrupt issues. It may also indicate a hardware failure.

Recommended Action Change the hardware or copy the error message exactly as it appears, and report it to your technical support representative.

%MSG_POS_OC3_OC12_SPA-3-MAX1668_INIT: [chars] (slot [dec]; bay [dec]) Device MAX1668 initialization failed.

Explanation MAX1668 temperature sensor initialization failed. It indicates a hardware failure.

Recommended Action Change the hardware or copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

```
%MSG_POS_OC3_OC12_SPA-3-RESOURCE_ERROR: [chars] ([hex], [hex], [hex]) [chars]
```

Explanation Failed to get required interface.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MSG_POS_OC3_OC12_SPA-3-SMM665_INIT: [chars] (slot [dec]; bay [dec]) Device SMM665 initialization failed.

Explanation SMM665 Summit Controller initialization failed. It indicates a hardware failure.

Recommended Action Change the hardware or copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

%MSG_POS_OC3_OC12_SPA-3-SPI42_CREATE: [chars] (slot [dec]; bay [dec]) Device SPi42 creation failed.

Explanation SPi4.2 Device creation failed.

Recommended Action Change the hardware or copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

%MSG_POS_OC3_OC12_SPA-3-SPI42_INIT: [chars] (slot [dec]; bay [dec]) Device SPi42 initialization failed.

Explanation SPi42 Device initialization failed. It indicates a hardware failure.

Recommended Action Change the hardware or copy the error message exactly as it appears, and report it to your technical support representative.

%MSG_POS_OC3_OC12_SPA-3-XCVR_ANALYZE: [chars] (slot [dec]; bay [dec]; port [dec]) Tranceiver analyze failed.

Explanation Tranceiver analyze failed.

Error Message

%MSG_POS_OC3_OC12_SPA-3-XCVR_RATE_NOTSUPPORTED: [chars] (slot [dec]; bay [dec]) Tranceiver rate not supported on the SPA.

Explanation Tranceiver rate not supported on the SPA.

Recommended Action Remove the tranceiver module and insert a valid module with rate that is supported on the SPA.

Error Message

Explanation Both E1 and T1 module detected on board.

Recommended Action Install either T1 or E1 Daughter cards only.

MSPI Messages

The following are Mail Service Provider messages.

Error Message

```
%MSPI-1-MSPI_BAD_CONFIG: MSPI-bad configuration, %s
```

Explanation A configuration error was detected.

Recommended Action Add or fix the Dial Peer configuration.

Error Message

```
%MSPI-1-NOMEMORY: msgtxt_nomemory
```

Explanation The requested operation could not be accomplished because of a low memory condition.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

%MSPI-2-MSPI_BAD_CONTEXT: MSPI-bad context pointer, %s

Explanation A bad context pointer was passed.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MSPI-2-MSPI_INTERNAL_ERROR: MSPI-Internal software error, cid=[dec], [chars]

Explanation An internal software error occurred. This would happen when the IOS software runs into any null pointer, invalid state or event, or other failed operation

Recommended Action If the message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MSPI-4-MSPI_BAD_MESSAGE: MSPI- Bad message received: [chars]

Explanation An unexpected message has been received.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at

http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

%MSPI-4-MSPI_NO_SMTP: MSPI- Can't connect to the SMTP server, cid=[dec], [chars]

Explanation No connection was created to the specified SMTP server.

Recommended Action Use the following commands to collect the information: show call active voice, show call active fax, show call history voice, show call history fax, debug mspi send, debug mspi receive, or debug fax mspi all

Error Message

```
%MSPI-4-MSPI_NO_SMTP_SEND: MSPI- Could not send data to the SMTP server, cid=[dec], [chars]
```

Explanation A connection was made to the SMTP server, but no data can be sent.

Recommended Action Use the following commands to collect the information on why no data can be sent: show call active voice, show call active fax, show call history voice, show call history fax, debug mta send all, debug mta receive all or debug fax mta all.

Error Message

```
%MSPI-4-SMTP_NOT_CONNECTED: SMTP- failed %s, %d
```

Explanation A connection attempt to a remote mail server was not successful. This unexpected behavior.

Recommended Action No action is required.

Error Message

```
%MSPI-6-SMTP_OPEN: SMTP- opening %s, %d
```

Explanation A connection attempt ...

Recommended Action No action is required.

MTRIE Messages

Error Message

```
%MTRIE-4-MTRIECORRUPTLEAF: [IP_address]/[dec] - [chars]
```

Explanation An internal software error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at

http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%MTRIE-4-MTRIELEAFOPFAIL: [IP_address]/[dec] - [chars]

Explanation An internal software error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%MTRIE-4-PLACEALLOC: Failed to allocate place holder

Explanation An internal software error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

MUESLIX Messages

The following are Mx serial application-specific integrated circuit (ASIC) messages.

```
%MUESLIX-1-CLOCKRATE: [chars]:Link is brought [chars] due to clock rate change, threshold configured = [int], received clock rate = [int]
```

Explanation The received clock rate has been changed from below the configured threshold to above the configured threshold, or vice versa.

Recommended Action If the clock rate has fallen below the configured threshold, check the received clock rate from the provider end.

Error Message

```
%MUESLIX-1-DWNLDFL: Mx serial (bay [dec]): PA down load failed
```

Explanation The Mx serial hardware has failed and could not download its operational microcode.

Recommended Action Attempt to reseat the PA properly in the system slots. If this error recurs, verify for the hardware failure, including the Cisco 7200 chassis if the failure occurred with the 7200, the VIP if the failure occurred with the RSP, and the PA. This error will occur only if there is a hardware failure.

Error Message

```
%MUESLIX-1-FAILURE_CAUSE: [chars]: [chars] [chars]: [hex], [hex]
```

Explanation This message provides further information on what caused the problem with restarting (STARTFAIL) or stopping (STOPFAIL) the serial interface.

Recommended Action Extract the information from the port adapter to determine which error caused the problem with restarting or stopping the serial interface. Enter the debug serial mueslix command. Enter the show tech-support and show tech-support and show log commands. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs. Disable the debug serial mueslix command after the information has been gathered.

Error Message

%MUESLIX-1-HALT: Mx serial: [chars] TPU halted: cause [hex] status [hex] shadow [hex]

Explanation The Mx serial firmware is not in synchronization with the driver.

Recommended Action This condition will clear by itself. Enter the **debug serial mueslix** command. Enter the **show tech-support** and show tech-support and **show log** commands. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools

and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs. Disable the **debug serial mueslix** command after the information has been gathered.

Error Message

```
%MUESLIX-1-INITFAIL: Mx serial (bay [dec]), Init Failed at [chars]
```

Explanation The Mx serial port adapter has failed to complete its hardware initialization.

Recommended Action Attempt to reseat the PA properly in the system slots. If this error recurs, verify for the hardware failure, including the Cisco 7200 chassis if the failure occurred with the 7200, the VIP if the failure occurred with the RSP, and the PA. This error will occur only if there is a hardware failure.

Error Message

```
%MUESLIX-1-STARTFAIL: Mx serial, [chars] Start Failed at [chars]
```

Explanation A software or hardware error has occurred. The Mx microcode is not responding to the enable command that was used to restart the serial interface.

Recommended Action Enter the debug serial mueslix command. Enter the show tech-support and show log commands. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs. Disable the debug serial mueslix command after the information has been gathered.

Error Message

```
%MUESLIX-1-STOPFAIL: Mx serial, [chars] Stop Failed at [chars]
```

Explanation A software or hardware error has occurred. The Mx microcode is not responding to the disable command that was used to stop the serial port.

Recommended Action Enter the **debug serial mueslix** command. Enter the **show tech-support** and show tech-support and **show log** commands. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance,

open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs. Disable the **debug serial mueslix** command after the information has been gathered.

Error Message

```
%MUESLIX-3-DISCOVER: Mx serial (bay [dec]): Interface found: [dec]
```

Explanation The system was not able to recognize all the Mueslix devices that are present on the system.

Recommended Action Attempt to reseat the PA properly in the system slots. If this error recurs, verify for the hardware failure, including the Cisco 7200 chassis if the failure occurred with the 7200, the VIP if the failure occurred with the RSP, and the PA. This error will occur only if there is a hardware failure.

Error Message

```
%MUESLIX-3-ERROR: [chars]
```

Explanation General error information.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MUESLIX-3-NOTMUESLIX: Mx serial (bay [dec]): Device reported [hex]
```

Explanation The system hardware has failed. A non-Mx serial device pointed at the Mx serial software.

Recommended Action Check the system configuration for the failure in the bay number that is reported in the error message. If the device is not a Mueslix-based PA, contact the appropriate component to which that PA belongs. If the device is a Mueslix-based PA, attempt to reseat the PA. If this message recurs, enter the show tech-support and show log commands, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%MUESLIX-3-OWNERR: [dec] packet buffer, pak=[hex]
```

Explanation A software or hardware error has occurred. The Mx serial driver detected that the transmit ring is in an inconsistent and unrecoverable state.

Recommended Action Enter the **debug serial mueslix** command. Enter the **show tech-support** and show tech-support and **show log** commands. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at

http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs. Disable the **debug serial mueslix** command after the information has been gathered.

Error Message

```
%MUESLIX-4-DEF_SUBRATE: %s %s
```

Explanation User has changed the dsu bandwidth using DS3 remote management commands. This won't change the user configured dsu bandwidth

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

MV64 Messages

Error Message

```
%MV64-1-BAD_IDB: Invalid Interface Descriptor Block
```

Explanation The driver tried to fetch the interface's IDB and failed.

Recommended Action Software bug - open a case with Development Engineering. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

%MV64-1-BAD_MEDIA: Unknown media-type in subblock

Explanation The media-type specified in the driver subblock is invalid.

Recommended Action Software bug - open a case with Development Engineering. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MV64-1-BAD_PARTICLE: Problem getting particle size

Explanation The driver was unable to get the particle size for this interface.

Recommended Action Software bug - open a case with Development Engineering. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MV64-1-BAD_PLUGIN: Plugin function table incomplete or missing

Explanation The driver could not access the PA's specific function table.

Recommended Action Software bug - open a case with Development Engineering. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MV64-1-BAD_POOL: Could not init buffer pools

Explanation The driver failed to get a pool of buffers from IOS.

Recommended Action Software bug - open a case with Development Engineering. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools

and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

 $MV64-1-BAD_SB_NOMEM$: [chars] - Cannot create IDB subblock due to insufficient memory

Explanation There was insufficent system memory to create the subblock.

Recommended Action The router requires more main memory. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MV64-1-BAD_STRUCT: Could not initialize structure

Explanation The driver failed to initialize a structure.

Recommended Action Software bug - open a case with Development Engineering. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MV64-1-BAD_SUBBLOCK: [chars] - Could not install or use IDB subblock

Explanation An internal IOS error prevented the IDB subblock from being installed or used.

Recommended Action Software bug - open a case with Development Engineering. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

%MV64-1-IDBTYPE_UNK: Unknown IDBTYPE while starting driver

Explanation The IDBTYPE in the interface's instance structure is undefined for this driver.

Recommended Action Software bug - open a case with Development Engineering. Copy the message exactly as it appears on the console or in the system log.Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MV64-1-INITFAIL_NOMEM: [chars], initialization failed, no buffer memory

Explanation The Ethernet port initialization failed due to insufficient memory.

Recommended Action The router requires more packet memory - consider upgrade. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MV64-1-MODE_INVALID: Unknown or invalid chip mode (MII/TBI)

Explanation The driver subblock contains an invalid or undefined chip operating mode (MII or TBI mode).

Recommended Action Software bug - open a case with Development Engineering. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

```
%MV64-1-RESET: MAC Still in Reset
```

Explanation An attempt was made to access the MAC while it was in reset.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MV64-2-NOISL: Interface [chars] does not support ISL
```

Explanation ISL is not supported on the specified interface's hardware.

Recommended Action No action is required.

Error Message

```
%MV64-3-BAD_GBIC_EEPROM: [chars] - GBIC contains a bad EEPROM
```

Explanation Interface contains a GBIC with a bad EEPROM. This causes the link to be down.

Recommended Action Ensure the GBIC type is compatible with the interface. Verify that the GBIC was obtained from Cisco or a supported vendor.

Error Message

```
%MV64-3-ERRINT: [chars], error interrupt, mac_status = [hex]
```

Explanation The MAC controller has signalled an error condition.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MV64-3-TOOBIG: [chars], packet too big ([dec]), from [enet]
```

Explanation The interface detects a packet larger than what is defined by MTU.

Recommended Action Check the other station's MTU settingNo action is required.

```
%MV64-3-UNKNOWN_GBIC: [chars] - Unknown GBIC type
```

Explanation Interface contains a GBIC of unknown type. This causes the link to be down.

Recommended Action Ensure the GBIC type is compatible with the interface. Verify that the GBIC was obtained from Cisco or a supported vendor.

MV64340_ETHERNET Messages

Error Message

```
%MV64340_ETHERNET-3-MACINIT: [chars], MAC init failed, [chars]
```

Explanation The MV64340 Ethernet device driver tried to initialize the MV64340 Ethernet controller, but the controller initialization failed.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MV64340_ETHERNET-3-MACSTOP: [chars], MAC stop failed, [chars]
```

Explanation The MV64340 Ethernet device driver tried to stop the MV64340 Ethernet controller, but the controller did not stop properly.

%MV64340_ETHERNET-3-PHYBUSY: [chars], PHY is not responding

Explanation The MV64340 Ethernet device driver tried to access a register on the Ethernet PHY device, but the PHY did not respond to the register access on time.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MV64340_ETHERNET-3-PHYCONFIG: [chars], PHY configuration failed

Explanation The MV64340 Ethernet device driver tried to configure the Ethernet PHY device, but the PHY configuration failed.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MV64340_ETHERNET-3-PHYRESET: [chars], PHY reset failed

Explanation The MV64340 Ethernet device driver tried to reset the Ethernet PHY device, but the PHY reset failed.

%MV64340_ETHERNET-3-RXQERROR: [chars], Rx queue error on queue [dec]

Explanation The MV64340 Ethernet controller has encountered a receive queue error.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MV64340_ETHERNET-3-TXQERROR: [chars], Tx queue error on queue [dec]

Explanation The MV64340 Ethernet controller has encountered a transmit queue error.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MV64340_ETHERNET-5-EXCESSCOLLISION: [chars], excessive collision error

Explanation More than 16 collisions occurred during frame transmission. This temporary condition is due to heavy Ethernet traffic, a duplex mismatch, or a non-standard Ethernet controller on the Ethernet segment.

Recommended Action Check the duplex setting, and change the configuration. If the condition corrects itself, no action is required. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%MV64340_ETHERNET-5-LATECOLLISION: [chars], late collision error

Explanation During frame transmission, a collision occurred at an unexpected time. This condition is due to a duplex mismatch or a non-standard Ethernet controller on the Ethernet segment.

Recommended Action Check the duplex setting, and change the configuration. If the condition corrects itself, no action is required. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MV64340_ETHERNET-5-OVERRUN: [chars], receive overrun error

Explanation While receiving a frame, the local buffer of the MV64340 Ethernet controller exceeded the permitted amount of data. Data could not be transferred to the host memory fast enough to keep up with the data input rate. This condition is usually temporary and depends on transient peak loads within the system.

Recommended Action The system should recover. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MV64340_ETHERNET-5-TOOBIG: [chars], Tx pak is too big, [dec] bytes

Explanation A packet greater than the assigned MTU size of this interface was queued up for transmission.

Recommended Action The system should recover. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%MV64340_ETHERNET-5-TOOSMALL: [chars], Tx pak is too small, [dec] bytes

Explanation A small packet (less than 2 bytes) was queued up for transmission. The interface cannot handle such small packets for transmission.

Recommended Action The system should recover. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MV64340_ETHERNET-5-UNDERRUN: [chars], transmit underrun error

Explanation While transmitting a frame, the local buffer of the MV64340 Ethernet controller ran out of data. Data could not be transferred from the host memory fast enough to keep up with the data output rate. This condition is usually temporary and depends on transient peak loads within the system.

Recommended Action The system should recover. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

MWAM Messages

The following are crash information and bootflash messages.

Error Message

%MWAM-0-ADDRESS_TRAP: Address trap: [dec] occurred on physical address: [hex] at EPC: [hex], ERR_EPC: [hex]

Explanation A previously defined address trap has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MWAM-0-CORRECTABLE_ECC_ERR: A correctable ECC error has occurred, A_BUS_L2_ERRORS: [hex], A_BUS_MEMIO_ERRORS: [hex], A_SCD_BUS_ERR_STATUS: [hex]

Explanation A correctable ECC error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MWAM-0-MISDIRECTED_INTERRUPT: A misdirected interrupt occurred with int_mask: [hex]

Explanation A misdirected interrupt occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying

information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MWAM-0-UNCORRECTABLE_ECC_ERR: An uncorrectable ECC error has occurred, A_BUS_L2_ERRORS: [hex], A_BUS_MEMIO_ERRORS: [hex], A_SCD_BUS_ERR_STATUS: [hex]

Explanation An uncorrectable ECC error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

%MWAM-4-FAILED_FILE_SYNC: Failure creating or synchronizing MWAM configuration file to standby: %s, %s

Explanation The active supervisor has failed to copy an MWAM configuration file from bootflash: to slavebootflash:. The standby supervisor will not be up-to-date with respect to the MWAM configuration files, should a switchover occur.

Recommended Action Verify that there is space available on the bootflash: and slavebootflash: devices. It may be necessary to squeeze either or both devices to recover space used by deleted or over-written files. After taking these actions, a new attempt to synchronize files can be started either by resetting the standby supervisor or by configuring no mwam bootflash access followed immediately by mwam bootflash access If these actions do not resolve the issue, gather the output from the commands: - dir bootflash: - dir slavebootflash: - show bootflash: - show slavebootflash: -If possible set debug mwam all on the active supervisor, then reset the standby supervisor with hw-module module reset capturing the debug information that appears on the active supervisor's console. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MWAM-4-FAILED_TASK_INIT: Failed to start a required task: %s, %s

Explanation A necessary process failed to be created.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

 $MWAM_FILESYSTEM-3-FC_CANNOT_FORMAT: Insufficient memory to format bootflash file system.$

Explanation The router does not have enough working storage available in heap memory to format a file system for crashinfo data. The router will function normally without a bootflash file system, however, the router cannot save information for problem analysis if it crashes.

Recommended Action Try to format the file system again at a later time or shortly after a re-boot.

%MWAM_FILESYSTEM-3-FC_DIR_IS_FULL: Cannot add [chars] to file system, directory is full.

Explanation The file system directory holds a limited number of entries, and an attempt was made to add a new file when the directory was already full. This can happen even when the file system still contains free space.

Recommended Action Delete an existing file or FORMAT the file system.

Error Message

%MWAM_FILESYSTEM-3-FC_FLASH_WRITE_ERROR: Cannot write to bootflash file system: [chars].

Explanation The router cannot write to the bootflash.

Recommended Action If the problem occurred while executing a CLI command, try the command again. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MWAM_FILESYSTEM-3-FC_INVALID_DIR_REQ: Cannot read or write complete [chars] file system.

Explanation A CLI command attempted to copy or overwrite the full file system.

Recommended Action Copy from or to an individual file.

Error Message

%MWAM_FILESYSTEM-6-BOOTFLASH_BUSY: Cannot access bootflash, filesystem is busy

Explanation The MWAM bootflash does not support reading and writing at the same time. The message means that bootflash is being accessed by some other operation, like copy, dir, format or squeeze.

Recommended Action Try the bootflash operation again after other operations have completed.

```
%MWAM_FLASH-3-ERR: [chars]
```

Explanation An error occured while programming/erasing the BootFlash

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MWAM_FLASH-3-FLASH_LOCKED_BY_OTHER_CPU: [chars]
```

Explanation The other CPU within this complex is programming the shared flash, flash programming must complete before proceeding with reload.

Recommended Action Wait for the other CPU to complete its flash programming operation, then re-enter the CLI command.

Error Message

```
%MWAM_FLASH-3-OTHER_CPU_RELOAD: [chars]
```

Explanation The other CPU within this complex is reloading, flash programming operation cannot proceed.

Recommended Action Wait for the system to complete the reload operation.

Error Message

```
%MWAM_FUR-1-INFO: [chars]
```

Explanation Information about the Field-Upgradable ROMMON.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information. MWAM_NVRAM Messages

Recommended Action The following are Multiplexor WAN Application Module NVRAM messages.

```
%MWAM_FUR-3-ERR: [chars]
```

Explanation An error occurred while upgrading or invalidating the Field-Upgradable ROMMON.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MWAM_NVRAM-3-ERR: [chars]
```

Explanation An error occurred while saving or erasing the configuration from flash.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying

information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create.or.contact.your.Cisco.technical.support

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MWAM_NVRAM-5-INFO: [chars]
```

Explanation Information showing the state of the NVRAM configuration in the BootFlash.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MWAM_NVRAM-5-KRUSTY_NVRAM_NOT_FOUND: [chars]
```

Explanation Information stating there is no NVRAM pointer.

Recommended Action This indicates either NVRAM has not initialised properly, or it is corrupted. Copy the message exactly as it appears on the console or in the system log.Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some

messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MWAM_VRTC-3-INVALID_DATE: Trying to set an invalid date ([dec]/[dec]/[dec]) in the system

Explanation A message containing an invalid date (for e.g. 30 Feb or 31 Nov) is received by the MWAM module.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MWAM_VRTC-5-INVALID_TIME: Trying to set invalid time summer_time_start[[dec]], set time[[dec]], summertime offset[[dec]]

Explanation A message containing time which violates the summertime rules, is received by the MWAM module.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

MWR1900_QOS_GENERAL Messages

Error Message

%MWR1900_QOS_GENERAL-3-EREVENT: [chars] at [chars]:[dec]

Explanation Failed NULL pointer or function return code check during sanity tests.

Recommended Action Follow the instructions, if any, provided in the message text. If you require further assistance, Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%MWR1900_QUEUE_CFG_GENERAL-2-EREVENT: [chars] at [chars]:[dec]
```

Explanation Failed NULL pointer check or function return code check during sanity tests.

Recommended Action Follow the instructions, if any, provided in the message text. If you require further assistance, Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

MWR1900_REDUNDANCY Messages

 $\label{lem:Recommended Action} \begin{tabular}{ll} \textbf{Recommended Action} & \textbf{The following are MWR Redundancy messages.} \end{tabular}$

Error Message

%MWR1900_REDUNDANCY-2-CRITEVENT: [chars]

Explanation Critical error.

 $MWR1900_REDUNDANCY-2-NO_BACKHAUL_INTF:$ No interface has been configured as the MWR1900 Backhaul Interface

Explanation Redundant operation requires an interface to be configured as a Backhaul Interface.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MWR1900_REDUNDANCY-2-NO_FE0_INTF: No FastEthernet 0/0 interface detected

Explanation Redundant operation requires detection of the onboard FE 0/0 interface.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MWR1900_REDUNDANCY-2-NO_FE1_INTF: No FastEthernet 0/1 interface detected

Explanation Redundant operation requires detection of the onboard FE 0/1 interface.

 $MWR1900_REDUNDANCY-2-NO_HEALTH_INTF:$ No interface has been configured as the MWR1900 Health Interface

Explanation Redundant operation requires a loopback interface to be configured as a Health Interface.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

 $MWR1900_{REDUNDANCY-2-NO_{REVERTIVE_INTF}\colon No interface has been configured as the MWR1900 Revertive Interface$

Explanation Redundant operation requires a loopback interface to be configured as a Revertive Interface.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MWR1900_REDUNDANCY-2-STUCK_ACTIVE_STANDBY: MWR1900 stuck in Active_Standby state

Explanation HSRP states of Active and Standby should not coexist.

%MWR1900_REDUNDANCY-2-STUCK_STANDBY_ACTIVE: MWR1900 stuck in Standby_Active state

Explanation HSRP states of Standby and Active should not coexist.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MWR1900_REDUNDANCY-3-ERREVENT: [chars]

Explanation General error to be used for sanity tests.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MWR1900_REDUNDANCY-5-NOTEVENT: [chars]

Explanation Notification message.

Recommended Action No action is required.

MXT_FREEDM Messages

The following are MXT FREEDM messages.

Error Message

%MXT_FREEDM-1-DWNLDFL: 8PRI/4T board slot %d: Firmware download failed.

Explanation Failed to download firmware into 8PRI/4T board

Recommended Action Power Cycle the router. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying

information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MXT_FREEDM-1-HALT: 8PRI/4T board slot %d: Firmware sent a HALT interrupt.

Explanation Double bus fault occurred in the 8PRI/4T board firmware.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MXT_FREEDM-1-INVALID_SHMEM: Invalid Shared Memory size detected

Explanation Current shared memory present in the box is not supported

Recommended Action Replace the Shared Memory by the supported configuration. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%MXT_FREEDM-1-PCI_DBUS_BR_FAIL: PCI-DBUS Bridge in slot %d Failure: %s

Explanation Internal error occured in 8PRI/4T board

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

NAM Messages

Error Message

%NAM-3-NO_RESP: Module [dec] is not responding

Explanation The system could not establish a TCP connection with the module.

Recommended Action Enter the show module and show tcp brief commands and copy the output of those commands. Enter into a session with the module. Enter the show tech-support command and copy that output of the first few screens of that command. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show commands and your pertinent troubleshooting logs.

NAT64 Messages

Error Message

%NAT64-3-API_FAILED: [chars]

Explanation A call to the application programming interface (API) of another component has failed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NAT64-3-BAD_MAGIC: Invalid magic number([hex])

Explanation An internal data structure is corrupt.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance,

open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NAT64-3-EEXIST: [chars]

Explanation The item indicated in the message already exists.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NAT64-3-EINVAL: [chars]

Explanation An incorrect input value was provided to a function.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NAT64-3-ENOENT: [chars]

Explanation A lookup failed unexpectedly.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%NAT64-3-ENOMEM: Memory allocation failed

Explanation An attempt to allocate memory has failed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NAT64-3-INIT_FAILED: An initialization failed, rc([chars])

Explanation An initialization in the system has failed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NAT64-3-NAT64_REGISTRY_RC: A NAT64 registry call failed with rc([chars])

Explanation The return code from a NAT64 registry call indicates an error.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NAT64-3-RUNAWAY_LOOP: [chars]

Explanation A loop has exceeded the expected number of iterations.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities

will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NAT64-3-UNINITIALIZED: NAT64 feature is not properly initialized

Explanation A function call was made when the system was not properly initialized.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NAT64-6-HA_FLOW_CTRL_TIMEOUT: Bulk sync is flow controlled by [chars]

Explanation The bulk synchronization of the NAT64 configuration to the standby Route Processor (RP) has encountered a flow control condition that has effected a timeout. This will result in the reload of the standby RP to allow the bulk synchronization to restart.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NAT64-6-HA_PEER_READY: [chars]

Explanation The synchronization attempt for the message has determined that the transport has lost communication with its peer. This message indicates that the standby Route Processor (RP) is currently out of service, which implies a simplex redundancy mode.

Recommended Action Unavailable

```
%NAT64-6-HA_RELOAD: Reloading [chars], reason([chars])
```

Explanation A synchronization attempt between the active and standby Route Processor (RP) peers has failed with the reason specified in the message. The standby peer is reloaded in an attempt to resynchronize when operating in a stateful redundant mode.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

NATMIB_HELPER Messages

The following are NAT MIB helper messages.

Error Message

%NATMIB_HELPER-3-NOCREAT: NATMIB Helper Process not created - NAT MIB will not work properly

Explanation An attempt to start the NATMIB helper process failed when the NATMIB subsystem was initialized. The NATMIB Helper process could not be created. This condition might be cause by a lack of memory.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration. Reload the system after reconfiguring it.

NBAR Messages

The following are network-based application recognition (NBAR) messages.

Error Message

%NBAR-1-LINKNEXTCORRUPTED: link-next not NULL when allocated. link-next = [chars]

Explanation An attempt was made to get a link from the free bucket that is pointing to another resource. Links within the free bucket should have a null value; therefore, this link is corrupted and should not be used.

Recommended Action Configure the router by entering the ip nbar resources command to allocate a larger initial pool of resources.

%NBAR-1-LINKPREVCORRUPTED: link-prev not NULL when allocated. link-prev = [chars]

Explanation An attempt was made to get a link from the free bucket that is pointing to another resource. Links within the free bucket should have a null value; therefore, this link is corrupted and should not be used.

Recommended Action Configure the router by entering the ip nbar resources command to allocate a larger initial pool of resources.

Error Message

%NBAR-1-MAXMEMORYUSED: Reached maximum amount of memory allocated for stile

Explanation This platform allows NBAR to use a limited amount of memory for classification. The memory allocated for NBAR has been exhausted because of high traffic conditions.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

%NBAR-1-NODESIZEMISMATCH: Nodes size mismatch between parsing and sending:[chars]

Explanation A failure occurred while NBAR graph nodes were being distributed from the route processor to the line cards. This failure is related to changes in the node size between the parsing and sending phases.

Recommended Action Disable NBAR protocols.

Error Message

%NBAR-2-HEURISTIC_XDR_FAILED: Failure in the heuristic subsystem of NBAR: [chars]

Explanation A failure occurred while distribution of NBAR heuristic data structures were being distributed from the route processor to the line cards.

Recommended Action Disable heuristic protocols.

Error Message

%NBAR-2-NOMEMORY: No memory available for %s

Explanation An attempt at memory allocation failed.

Recommended Action Try these actions to remedy the problem: Add memory. Disable some features. Apply filtering to decrease the size of system data structures - the routing table, for example. In general, reduce other system activities to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

%NBAR-2-NOSTATEMEM: Memory for maintaining state used up

Explanation NBAR uses memory to maintain state information about stateful flows. There is a maximum limit on how much memory NBAR can use for this purpose and this limit has been reached.

Recommended Action Increase memory on platform.

Error Message

```
%NBAR-2-RMINVALIDCONFIG: NBAR resource manager : too many buckets (%d)
```

Explanation NBAR was configured such that the internal data structures needed to maintain stateful protocol information were too large.

Recommended Action Configure the router with the ip nbar resources with a smaller max-idle time.

Error Message

```
%NBAR-2-RMNORESOURCE: NBAR resources exhausted
```

Explanation In order to save stateful information on protocols, NBAR must use dynamic resources. These resources have been exhausted.

Recommended Action Configure the router with the ip nbar resources to allocate a larger initial pool of resources. The default number of initial resources is 10000. Also try configuring a shorter max-idle time.

Error Message

 $NBAR-4-STILE_MAX_PD_INTF:$ NBAR protocol-discovery is enabled on maximum number of interfaces ([dec]) supported by this platform

Explanation This platform allows NBAR to enable protocol-discovery on a limited number of interfaces, and that limit has reached.

Recommended Action Need to disable protocol-discovery from an interface, to enable protocol-discovery on any new interface.

Error Message

```
%NBAR_HA-5-NBAR_INFO: [chars]
```

Explanation Unavailable

Recommended Action Unavailable

NETCLK Messages

The following are Network Clock (NETCLK) synchronization messages.

%NETCLK-4-NETCLK_CHANGE: Network clock source transitioned from Priority [dec]
[chars] to Priority [dec] [chars]

Explanation This warning message indicates a change in the clock source.

Recommended Action No action is required.

Error Message

%NETCLK-4-NETCLK_CMD_FAIL: [chars]

Explanation A network clock command from RP to IOS-SR or SPAs has failed

Recommended Action The message can be ignored if the carrier card was reloaded or powered down. Otherwise,

Error Message

 $NETCLK-4-NETCLK_MODE_CHANGE: Network clocks are not available. All line cards mode changed to [chars]$

Explanation Network clocks not available.

Recommended Action No action is required.

Error Message

%NETCLK-5-NETCLK_CHANGE: Network clock source transitioned from priority [dec]
[chars] to priority [dec] [chars]

Explanation This notice indicates a change in the clock source.

Recommended Action No action is required.

Error Message

%NETCLK-5-NETCLK_MODE_CHANGE: Network clock source not available. The network clock has changed to [chars]

Explanation Unavailable

Recommended Action No action is required.

Error Message

%NETCLK-5-NETCLK_PHASE_LOST: Network clock source not available. Phase-lost on clock priority [dec] [chars]

Explanation Unavailable

Recommended Action No action is required.

%NETCLK-6-SEL_CLOCK_SRC:Synchronization source Ethernet0/0(QL-PRC) is selected by selection process(T0) to synchronize the system and generate T0 output.

Explanation A new clock source has been selected. If the system is running in QL-disabled mode, the clock quality information is not be included in the message.

Recommended Action No action is required.

Error Message

%NET_CLK_SEL-6-NETCLK_HOLDOVER_TIMEOUT: Network clock holdover timeout exceeded for reference [dec]

Explanation The network clock holdover timed out.

Recommended Action No action is required.

Error Message

%NET_CLK_SEL-6-NETCLK_SET_AUTOMATIC: Network clock selection seto automatic mode

Explanation The hardware selected the network clock.

Recommended Action No action is required.

Error Message

%NET_CLK_SEL-6-NETCLK_SET_FORCE: Network clock seclection forced.

Explanation The network clock selection was forced by the user.

Recommended Action No action is required.

Error Message

%NET_CLK_SEL-6-NETCLK_STATE_CHANGE: Network clock state change to [chars]
([chars])

Explanation The network clock state changed.

Recommended Action No action is required.

Error Message

%NETCONF-3-MEMORY: %s

Explanation Netconf subsystem has experienced a problem gettting the required memory to complete this operation.

Recommended Action Check system memory for other memory allocation errors and contact Technical support for problem resolution. In the absence of Cisco IOS software errors upgrading the memory in the network device may be required.

NETFLOW_AGGREGATION Messages

Error Message

%NETFLOW_AGGREGATION-3-FLOWMASK_CONFLICT: Netflow %s cannot set the required flowmask

Explanation Netflow aggregation flowmask conflicts with other features. If Netflow Data Export(NDE) is configured bump the NDE flowmask to interface full flow 'mls flow ip interface-full' and then reconfigure Netflow aggregation scheme.

Recommended Action If this message recurs copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%NETFLOW_AGGREGATION-4-NO_TOS_AGGR: Disable hardware switching to enable %s

Explanation Netflow does not currently support ToS-based aggregation schemes for hardware-switched flows.

Recommended Action If ToS-based aggregation is required disable hardware switching.

Error Message

%NETFLOW_AGGREGATION-4-OER_AGG_EXPORT_ERROR: OER Error [chars]

Explanation Error in receving OER aggregation export packet.

Recommended Action Disable OER Monitor Prefix aggregation.

Error Message

%NETFLOW_AGGREGATION-6-OER_MLS_LONG_AGING: MLS long aging time modified by OER to [dec]

Explanation OER modified long aging time which might be different from configured value.

Recommended Action No action is required.

NETGX_CRYPTO Messages

Error Message

%NETGX_CRYPTO-0-SELF_TEST_FAILURE: Encryption self-test failed ([chars])

Explanation One of the encryption self-tests has failed. The encryption engine is not operable in this state.

Recommended Action If the failure persists, contact Cisco to obtain a replacement IOS image.

Error Message

%NETGX_CRYPTO-1-ALIGN: Alignment failure on packet buffer: [hex]

Explanation A software error occurred. The VPN Module driver detected that the buffer is not aligned correctly.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NETGX_CRYPTO-1-EM_MULTDEV: Multiple VPN Modules not supported, ([dec]) found

Explanation Multiple VPN Modules not supported.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NETGX_CRYPTO-1-EM_PROC_INIT: VPN Module Command Processor initialization failed: ([chars])

Explanation VPN Module Command Processor initialization failed.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying

information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%NETGX_CRYPTO-1-INITFAIL: Slot [dec]: [chars]
```

Explanation The VPN Module driver failed to initialize at the specified point.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%NETGX_CRYPTO-1-NOMEMORY: [chars] creation failed for slot [dec]
```

Explanation The VPN Module driver could not allocate memory for the specified data structure.

Recommended Action Consider adding more memory. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%NETGX_CRYPTO-3-EM_PROC_ERR: VPN Module Command Processor error: ([chars])
```

Explanation VPN Module Command Processor error.

%NETGX_CRYPTO-4-ERROR: [chars]

Explanation An error occurred in the application using VPN Module.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NETGX_CRYPTO-6-SHUTDOWN: [chars] shutting down

Explanation The specified VPN Module is shutting down. It may have been physically removed.

Recommended Action Informational message only. It occurs in normal operation.

NETWORK_CLOCK_SYNCHRONIZATION Messages

Error Message

%NETWORK_CLOCK_SYNCHRONIZATION-4-NETCLK_CHANGE: Network clock source transitioned from Priority %d %s %s to Priority %d %s %s

Explanation This warning message indicates a change in the clock source.

Recommended Action No action required.

Error Message

%NETWORK_CLOCK_SYNCHRONIZATION-4-NETCLK_FAIL: Active network clock source [chars], priority [dec] failure

Explanation This warning message indicates that there has been a failure of active clock source

Recommended Action No action is required.

Error Message

%NETWORK_CLOCK_SYNCHRONIZATION-4-NETCLK_INIT: Network clock source initialised to local oscillator.

Explanation Warning indicates that network clock used will be internal.

Recommended Action No action is required.

%NETWORK_CLOCK_SYNCHRONIZATION-4-NETCLK_PLL_LOST_LOCK: Network clock %s PLL lost lock - clock source failed.

Explanation The clock source has failed.

Recommended Action If alternate source is available, it will be used.

Error Message

%NETWORK_CLOCK_SYNCHRONIZATION-6-NETCLK_ACTIVE: Active network clock source is [chars], priority [dec]

Explanation This indicates the presence of an active network clock along with its priority.

Recommended Action This is an informational message only. No action is required.

NETWORK_PORT_SATELLITE Messages

The following are network port satellite messages.

Error Message

%NETWORK_PORT_SATELLITE-3-PHY_LOCKUP: Repeated phy lockup seen on [chars].
Interface will be shut down.

Explanation The physical interface has locked up an excessive number of times. To avoid the interface becoming active and then quickly becoming inactive numerous times (link flapping), the interface has been shut down.

Recommended Action To re-enable the interface, enter the **shutdown** command, followed by the **no shutdown** command, in interface configuration mode to shut down and restart the interface.

Error Message

<code>%NETWORK_PORT_SATELLITE-6-MAC_LOCKUP:</code> Transmit lock up is detected in [chars]. This port is adminstratively down.

Explanation When the PHY is powered on and off, the MAC cycles from gigabits to 100-Mbps speed, and can lock up the port and stop sending packets. "PHY" refers to the physical layer device on the switch, which sends and receives optical signals and provides framing and line integrity.

Recommended Action Enter the **shutdown** and **no shutdown** commands in interface configuration mode to shut down and restart the port.

NETWORK_RF_API Messages

Error Message

%NETWORK_RF_API-3-CHKPT_ENTITY_FAIL: A checkpointing entity %s operation failed, rc=%d

Explanation An internal operation that is associated with checkpointing failed. The return code that is specified in the message output identifies the type of failure. The failure most likely occurred because of a software error. The system state between the active and standby units might not be properly synchronized.

Recommended Action Issue 'show checkpoint entities' and 'show checkpoint clients' to determine the problem.

Error Message

%NETWORK_RF_API-3-CLIENT_REGISTER_FAIL: Failed to register with %s, rc = %d

Explanation A redundancy client could not be registered. An internal failure associated with client registration occurred in the run-time module specified in the message output. The return code that is specified in the message output identifies the type of failure that was detected. The failure most likely occurred because of a software error. The system state between the active and standby units might not be properly synchronized.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%NETWORK_RF_API-3-FAILDECODEDATADESC: Cannot decode data descriptor for %s,
descriptor type=%s

Explanation An internal data descriptor could not be decoded for synchronization for the interface or controller in the run-time module specified in the message output. The failure most likely occurred because of a software error. The descriptor type specified in the message output, identifies the type of descriptor the failure occurred with. The system state between the active and standby units might not be properly synchronized.

Recommended Action Gather system logs and error messages at both the active and the standby units. Issue the recommended show commands at both the active and the standby units. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search

of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the commands and your pertinent troubleshooting logs. (show redundancy idb-sync-history).

Error Message

%NETWORK_RF_API-3-FAILSENDMSGTOACTIVE: Failed to send [chars] message to active
for [chars], [chars]

Explanation The specified synchronization message, which is an internal IPC message, could not be sent to the active unit in the specified run-time module. The failure most likely occurred because of a software error. Additional details on the nature of the message are specified in the message text on the console or in the system log. The system state between the active and standby units might not be properly synchronized.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

 $NETWORK_RF_API-3-FAILSENDMSGTOSTDBY: Failed to send %s message to standby for %s, rc=%d$

Explanation The specified synchronization message, which is an internal IPC message, could not be sent to the standby unit in the specified run-time module. The failure most likely occurred because of a software error. The numeric error code in the message output identifies the type of failure. The system state between the active and standby units might not be properly synchronized.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%NETWORK_RF_API-3-INVALID_CHKPT_STATUS_CODE: Invalid checkpointing status code received, rc=%d

Explanation An invalid checkpoint status code has been detected. An internal status code that is associated with checkpointing was found to be invalid. The return code that is specified in the message output identifies the invalid code that was detected. The failure most likely occurred because of a software error. The system state between the active and standby units might not be properly synchronized.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%NETWORK_RF_API-3-INVALID_MSG_RECEIVED: Invalid %s message received

Explanation A message that is used for state synchronization was not received correctly. An internal data structure for a message could not be retrieved. The failure most likely occurred because of a software error. The system state between the active and standby units might not be properly synchronized.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%NETWORK_RF_API-3-ISSU_MSG_MTU_INVALID: The ISSU message MTU is invalid: [chars]

Explanation A message buffer size that is used for state synchronization was found to be invalid. An internal data structure for a message could not be retrieved. The failure most likely occurred because of a software error. Additional details on the nature of the message are specified in the message text on the console or in the system log. The system state between the active and standby units might not be properly synchronized.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

 $NETWORK_RF_API-3-ISSU_MSG_TYPE_INCOMPAT: The active and standby ISSU message types are incompatible$

Explanation A message that is used for state synchronization is deemed to be incompatible. An internal data structure for a message could not be retrieved. The failure most likely occurred because of a software error. The system state between the active and standby units might not be properly synchronized.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NETWORK_RF_API-3-ISSU_REG_SES_INFO: Failed to register ISSU session information:
[chars]

Explanation The system failed to register the ISSU session information required to complete version exchange between the active and standby units. The failure most likely occurred because of a software error. Additional details on the nature of the message are specified in the message text on the console or in the system log. The system state between the active and standby units might not be properly synchronized.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NETWORK_RF_API-3-ISSU_START_NEGO_SES: Failed to start ISSU session: [chars]

Explanation The system failed to start the ISSU negotiation session required to complete version exchange between the active and standby units. The failure most likely occurred because of a software error. Additional details on the nature of the message are specified in the message text on the console or in the system log. The system state between the active and standby units might not be properly synchronized.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NETWORK_RF_API-3-ISSU_TRANSFORM_FAIL: The ISSU message [chars] transformation failed: [chars]

Explanation A message that is used for state synchronization could not be transformed correctly. An internal data structure for a message could not be retrieved. The failure most likely occurred because of a software error. Additional details on the nature of the message are specified in the message text on the console or in the system log. The system state between the active and standby units might not be properly synchronized.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

%NETWORK_RF_API-3-ISSU_UNREG_SES_INFO: Failed to register ISSU session information: [chars]

Explanation The system failed to unregister the ISSU session information required to complete version exchange between the active and standby units. The failure most likely occurred because of a software error. Additional details on the nature of the message are specified in the message text on the console or in the system log. The system state between the active and standby units might not be properly synchronized.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NETWORK_RF_API-3-NO_CHKPT_BUFFER: No checkpointing buffer for %s, rc=%d

Explanation A message data buffer that is used for state synchronization could not be obtained. An internal data structure could not be allocated for synchronization in the run-time module specified in the message output. The return code that is specified in the message output identifies the type of failure. The failure most likely occurred because of a software error or a lack of system memory. The system state between the active and standby units might not be properly synchronized.

Recommended Action If you determine that this condition was caused by a lack of system memory, reduce system activity to ease memory demands, or if conditions warrant, upgrade to a larger memory configuration. Otherwise, Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%NETWORK_RF_API-3-NO_MSG_BUFFER: No message buffer for %s

Explanation A message data buffer that is used for state synchronization could not be obtained. An internal data structure could not be allocated for synchronization in the run-time module specified in the message output. The failure most likely occurred because of a software error or a lack of system memory. The system state between the active and standby units might not be properly synchronized.

Recommended Action If you determine that this condition was caused by a lack of system memory, reduce system activity to ease memory demands, or if conditions warrant, upgrade to a larger memory configuration. Otherwise, Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%NETWORK_RF_API-3-NO_RESOURCES: %s

Explanation A run-time module could not obtain the resources that are required to complete a task. The failure most likely occurred because of a software error or a lack of system memory. Additional details on the nature of the error are specified in the message text on the console or in the system log. The system state between the active and standby units might not be properly synchronized.

Recommended Action If you determine that this condition was caused by a lack of system memory, reduce system activity to ease memory demands, or if conditions warrant, upgrade to a larger memory configuration. Otherwise, Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%NETWORK_RF_API-6-IDB_TRANSITIONS_PENDING: Switchover terminated with [dec]
transitions pending after there was no transition activity for [dec] seconds

Explanation The system terminated the switchover idb transitioning phase with a number of idb transitions still pending because no switchover related IDB transitions were logged during the specified time interval. Some connected routes might experience a temporary loss of traffic.

Recommended Action No action is required.

Error Message

```
%NET_SERV-4-UNEXPECTED: Unexpected error: %s
```

Explanation An unexpected error occurred while performing a services timer operation

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%NET_SERV-4-WARNING: Unexpected condition: %s
```

Explanation An unexpected condition was detected while performing a services timer operation

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

NEVADA Messages

Error Message

%NEVADA-0-BADADD: Add: Invalid nevada interrupt code [dec]

Explanation An attempt was made to specify an interrupt handler for an invalid interrupt type on an interrupt control chip. A fatal internal logic error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NEVADA-0-BADDISABLE: Disable: Invalid nevada interrupt code [dec]

Explanation An attempt was made to disable an invalid interrupt type on an interrupt control chip. A fatal internal logic error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NEVADA-0-BADENABLE: Enable: Invalid nevada interrupt code [dec]

Explanation An attempt was made to enable an invalid interrupt type on an interrupt control chip. A fatal internal logic error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

%NEVADA-0-BADENABLE2: Enable: No interrupt routine for code [dec]

Explanation An attempt was made to enable an interrupt routine on an interrupt control chip, but no interrupt routine was specified. A fatal internal logic error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NEVADA-0-BADINT: Interrupt received with no interrupt routine defined

Explanation An interrupt was received for a code with no interrupt handler defined. A fatal internal logic error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NEVADA-0-BADREMOVE: Remove: Invalid nevada interrupt code [dec]

Explanation An attempt was made to remove an interrupt handler for an invalid interrupt type on the an interrupt control chip. A fatal internal logic error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

NHRP Messages

The following are Next Hop Resolution Protocol (NHRP) messages.

```
%NHRP-3-PAKERROR: Receive %s for our %s, code: %s(%d), offset: %d, data: %s
```

Explanation Received an error notification packet indicating that the last packet the system sent was bad or not understood by the recipient.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%NHRP-3-PAKREPLY: Receive %s packet with error - %s(%d)
```

Explanation An NHS rejects or fails to serve our request packet.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NHRP-3-QOS_POLICY_APPLY_FAILED: Failed to apply QoS policy [chars] mapped to NHRP group [chars] on interface [chars], to tunnel [chars] due to [chars]

Explanation The application of QoS policy to tunnel failed. The failure could be due to internal error or policy installation failure. Policy installation can fail if the policy configuration is not supported for a tunnel.

Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%NHRP-3-TIMERLOOP: Timer process looping (%d/%d/%d/%d/%d/%d).

Explanation The process that processes timer events is looping, and perhaps thrashing on an ill-behaved timer event.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NHRP-4-QUOTA: Max-send quota of [int]pkts/[int]Sec. exceeded on [chars].

Explanation The quota for sending NHRP packets on the interface has exceeded the limit.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%NHRPSNMP-3-TREEINVALID: Setting tree to Invalid State @ - ([dec])

Explanation NHRP SNMP agent tree is not behaving as excepted.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%NHRPSNMP-5-TREERECOVERD: Tree recovered fromInvalid State @ - ([dec])

Explanation NHRP SNMP agent tree is not behaving as excepted.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

NI2 Messages

Error Message

%NI2-0-LC_EMERG: [chars]

Explanation A line card log message has been received.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%NI2-1-DISCOVER ENET: Failed to init Ethernet device [dec]

Explanation The software could not initialize.

Recommended Action Power down the system, reseat the interface card, and reboot the system. If the message recurs, If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support

representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%NI2-1-DISCOVER_SAR: Failed to init SAR device [dec]

Explanation The software could not initialize.

Recommended Action Power down the system, reseat the interface card, and reboot the system. If the message recurs, If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%NI2-1-LC_ALERT: [chars]

Explanation A line card log message has been received.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%NI2-1-NTC_IPC_DOWN: LOST IPC with DSL uplink:[chars]

Explanation Unavailable.

Recommended Action Unavailable.

```
%NI2-2-FPGALOAD: FPGA download failure: [chars]
```

Explanation A broken motherboard or NVRAM contents has been detected.

Recommended Action Run diagnostics to attempt to diagnose the problem.

Error Message

```
%NI2-2-LC_CRIT: [chars]
```

Explanation A line card log message has been received.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%NI2-3-BITS_FAILED: [chars] [chars] [chars] [chars]
```

Explanation The timing source that is used for timing bits has failed.

Recommended Action Determine the cause of the failure and correct the problem, is possible.

Error Message

```
%NI2-3-CHASSIS: Motherboard EEPROM : Chassis model not found.
```

Explanation The data stored in the motherboard EEPROM is invalid or is incomplete.

Recommended Action Contact your Cisco technical support representative to update your system.

Error Message

```
%NI2-3-CONFIG: Recommended port adapter configuration exceeded
```

Explanation Unavailable.

Recommended Action Unavailable.

```
%NI2-3-IONOTO: IO card discover in non-zero slot [dec]
```

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

```
%NI2-3-IPC: [chars]: IPC Failure
```

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

```
%NI2-3-IPCOPENFAILED: Couldn't open IPC portfor port id [hex] slot [dec]: [chars]
```

Explanation Information could not be obtained from a line card.

Recommended Action Reseat the line card in the specified slot.

Error Message

```
%NI2-3-LC_ERR: [chars]
```

Explanation A line card log message has been received.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%NI2-3-LC_UNKNOWN: [chars]
```

Explanation A line card log message has been received.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support

representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%NI2-3-LOSS_OF_SYNC: [chars] [chars] [chars] [chars]
```

Explanation The highest-configured priority clock has lost its synchronization or has failed.

Recommended Action Determine the cause of the failure and correct the problem.

Error Message

```
%NI2-3-NOMAC: Can't allocate MAC address for interface [int]/[int]
```

Explanation The MAC allocation limit has been exceeded.

Recommended Action Remove unnecessary interfaces.

Error Message

```
%NI2-3-NOMEM: OUT of Memory: [chars]
```

Explanation A memory allocation failure has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show tech-support command to gather data that may help identify the nature of the error. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%NI2-3-NOPORTINFO: Port info invalid for port [dec] slot [dec]: [chars]
```

Explanation Port details of the line card could not be accessed.

Recommended Action Reseat the line card. Reboot the chassis if this message recurs.

Error Message

```
%NI2-3-NOPORTINFO_ID: Port info invalid for port id [hex] slot [dec]: [chars]
```

Explanation Memory could not be allocated for IPC data.

Recommended Action Reseat the line card. Reboot the chassis if this message recurs.

%NI2-3-NO_ATM_PHY: Unable to determine trunk PHY type.

Explanation Data stored in the motherboard EEPROM is invalid or is incomplete.

Recommended Action Contact your Cisco technical support representative to update your system.

Error Message

%NI2-3-NO_SERIAL: Backplane EEPROM : no chassis serial number.

Explanation Data stored in the backplane EEPROM is invalid or is incomplete.

Recommended Action Contact your Cisco technical support representative to update your system.

Error Message

```
%NI2-3-PROCESS_FAILED: [chars] [chars] [chars] [chars]
```

Explanation The redundancy process has failed. The system currently has no backup.

Recommended Action Reboot the unit on which the process failed.

Error Message

```
%NI2-3-UNK_CHASSIS: Motherboard EEPROM : unknown chassis model [hex].
```

Explanation Data stored in the backplane EEPROM is invalid or is incomplete.

Recommended Action Contact your Cisco technical support representative to update your system.

Error Message

%NI2-4-COOKIE: Corrupt or missing MAC address cookie using random base [enet]

Explanation An invalid MAC address in the backplane EEPROM has been detected.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

```
%NI2-4-LC_WARN: [chars]
```

Explanation A line card log message has been received.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%NI2-4-MACBLKSIZE: Unknown MAC address block size.
```

Explanation Data stored in the midplane is invalid or is incomplete.

Recommended Action Contact your Cisco technical support representative to update your system.

Error Message

```
%NI2-4-NOCPUVER: Invalid CPU ID, assuming revision 1
```

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

```
%NI2-4-NTC_SLOT: DSL Alternate uplink [chars] Not Supported
```

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

```
%NI2-4-PCIVALID: PCI activation failed, bay [dec], [hex]
```

Explanation Unavailable.

Recommended Action Unavailable.

```
%NI2-5-LC_NOTICE: [chars]
```

Explanation A line card log message has been received.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%NI2-5-NTC_IPC_UP: Established IPC with DSL uplink:[chars]
```

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

```
%NI2-6-LC_INFO: [chars]
```

Explanation A line card log message has been received.

Recommended Action No action is required.

Error Message

```
%NI2-7-LC_DEBUG: [chars]
```

Explanation A line card log message has been received.

Error Message No action is required.

```
%NILE_ASIC-2-TCAM_PARITY_ARRAY_ERR: TCAM4 Parity Array Error at Asic: [dec] TCAM Index: [hex] Application: [chars] Region [chars]
```

Explanation The system detected a parity error in the ternary content addressable memory 4 (TCAM4) and the entry was invalidated causing an unexpected traffic forwarding behavior.

Recommended Action Reload the switch.

```
%NILE_ASIC-2-TCAM_PARITY_IO_ERR: TCAM4 Parity IO Error at Asic: [dec]
```

Explanation The system detected a parity error in the ternary content addressable memory 4 (TCAM4) Input/Output in the application-specific integrated circuit (ASIC) causing unexpected traffic forwarding behavior.

Recommended Action Reload the switch.

Error Message

```
%NILE_ASIC-2-TCAM_PHASE_ERR: TCAM4 Phase Error Detected at Asic: [dec].
```

Explanation A fatal error occurred. The system detected a phase error in the ternary content addressable memory 4 (TCAM4).

Recommended Action Reload the switch.

Error Message

```
%NILE_LICENSE-1-LICENSE_REGISTER_FAILED: [chars] - rc = [dec]
```

Explanation License initialization failed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information

NIM Messages

The following are network interface module (NIM) messages.

Error Message

```
%NIM-2-BADNIMREV: Unsupported version of %s NIM in slot %d Version 0x%x
```

Explanation The indicated network interface module (NIM) is not supported because it is not of the correct revision. Certain platforms (Cisco 4500 or Cisco 4700, for example) require some NIMs to be of a minimum rev level.

Recommended Action Upgrade the NIM to the proper level.

%NIM-2-BADSLOT: Illegal reference to non-existent slot %d

Explanation An internal software error occurred.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

%NIM-2-BADSUBUNIT: Illegal reference to non-existent subunit %d in slot %d

Explanation An internal software error occurred.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

%NIM-2-DEADICHAINQ: Attempted to manipulate uninitialized ichainQ in %s

Explanation A software or hardware error occurred.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

%NIM-2-LOSTICHAINQ: Couldn't find idb 0x%x in ichainQ in %s

Explanation A software or hardware error occurred.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

%NIM-2-NOHWADDRESS: All hardware addresses have been allocated - maximum of %d

Explanation An internal software error occurred.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

%NIM-2-UNSUPNIM: Unsupported %s NIM in slot %d

Explanation The indicated NIM is not supported on this platform.

Recommended Action Remove the NIM.

%NME_APA-1-INITFAIL: NM slot [dec]: PCI device [dec] initialization failed

Explanation The initialization of the NME-APA Integrated service engine has failed.

Recommended Action Power down, reseat the interface card, and reboot the system. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at

http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

NME_APA Messages

The following are NME-APA integrated service engine messages.

Error Message

%NME_APA-1-MULTIPLEREGISTRATION: NM slot [dec]: multiple NME-APA Integrated service engine not allowed

Explanation Another NME-APA Integrated service engine is already installed.

Recommended Action Power down, remove the extra cards, and reboot the system. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at

http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NME_APA-1-UNSUPPORTED: NM slot [dec]: [chars] registration failed

Explanation NME-APA hardware type is not supported by this platform.

Recommended Action Power down and use NME-APA supported by this platform. If this message recurs, Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at

http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%NMSP-3-INIT_FAIL: NMSP process failed to initialize

Explanation NMSP process failed to initialize and cannot accept incoming NMSP messages

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

 $NM_8_16AM_V2_MODULE-3-FW_DOWNLOAD_FAIL: NM-8/16AM-V2 (slot [dec]), firmware upgrade failed, reverted to bundled version$

Explanation NM-8/16AM-V2 failed to download the specified modem firmware. To recover the modems, they have been sent the firmware bundled with the image.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NM_8_16AM_V2_MODULE-3-INIT_FAILED: NM-8/16AM-V2 Slot: [dec] Initialization failed ([chars]=[hex])

Explanation The modem module failed to initialize.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

```
%NM_8_16AM_V2_MODULE-3-INTERNAL_ERROR: NM-8/16AM-V2 Internal Error ([chars])
```

Explanation The router encountered an internal software error.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

NP Messages

The following are Network Processor messages.

Error Message

```
%NP-2-BADREAD: Read failed for [chars] on NP [dec].
```

Explanation There was a read error on the file during the microcode image load.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

Error Message

```
%NP-2-HDRCORRUPT: Microcode header has been corrupted, expected [hex], got [hex].
```

Explanation Network Processor microcode appears to be corrupted. This could be due to an already corrupted image or, less likely, a software problem.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

%NP-2-INVALID: Corrupted microcode retrieved from the image bundle for NP [dec].

Explanation The retrieved microcode appears to be corrupted.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

Error Message

%NP-2-NONEXIST: Could not open or file does not exist [chars] for NP [dec].

Explanation There is a possibility that the Network Processor microcode may not be bundled into the image correctly or a software error occurred that prevented locating the microcode.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

Error Message

%NP-2-RESTARTED: NP [dec] restarted.

Explanation Network Processor has been restarted, either manually or via a microcode reload, or as a result of an exception.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

%NP-2-WRONGHARD: The microcode type does not match, expected [hex], got [hex].

Explanation There is a possibility the images has been corrupted or, less likely, an incorrect microcode set is bundled into the image.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

Error Message

%NP-2-WRONGMAGIC: Microcode section contains inalid magic for NP [dec].

Explanation Network Processor microcode appears to mismatch the ucode hdr type. This could be due to an already corrupted image or a read error on the file during the downloading on the NP.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

Error Message

%NP-3-CTRL_POOL_CREATION_FAIL: Control buffer pool could not be created

Explanation NextPort driver could not create the control buffer pool required for tx and rx of NP control messages

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%NP-3-INVPORT: NAK Response Received on invalid slot/port [dec]/[dec]

Explanation A NAK response was sent by the NextPort module on invalid slot or port.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP-3-MODNOTEXIST: Slot %d, DFC %d, Module %d not exist.

Explanation No Virtual Console opens for this module.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

%NP-3-NAKRSP: NAK Response Received - command 0x%x, result code 0x%x, msg id 0x%x, session id 0x%x, msg tag 0x%x

Explanation A NAK response was sent by the NextPort module.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

%NP-3-NOTMSGID: Message Id %x not supported.

Explanation The Nextport does not supported this control message id.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

```
%NP-3-NULL_PTR: [chars] is NULL in [chars] for port [dec]
```

Explanation An unexpected null pointer is in the location specified in the error message.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

%NP-3-QUEUEFULL: %s queue is full for Slot %d, DFC %d, Module %d.

Explanation TX queue is full for this module.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

%NP-3-RESET_DFC: DFC Reset-Cleared Failed - DFC %d

Explanation DFC Reset-Cleared Failed

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP-5-RESTARTEDALL: All NPs have been restarted.

Explanation All Network Processors have been restarted, either manually or via a microcode reload, or as a result of an exception.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

Error Message

%NP-6-QUEUE_PROC: Control & Data queue processing [chars]

Explanation NextPort driver has enabled/disabled processing of the NP module queues.

Recommended Action Ensure that there is a matching enable to every disable. If processing is not re-enabled within a second or so of disabling then messages will be discarded and the module will timeout and be reset.

%NP_BS-2-CARRIER_CARD_INVALID_DFC: Feature board in slot [dec] does not have valid DFCs!

Explanation Feature Board does not have valid DFCs.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_BS-2-HYBRID_CARD_INVALID_DFC_CONFIG: Feature board in slot [dec] does not have valid DFCs!

Explanation The feature board does not have valid DFCs.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NP_BS-2-THREE_NP108_NOT_PRESENT: DFC in slot %d does not have three NP108s!

Explanation DFC does not have three NP108s which is an illegal configuration

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_BS-3-CRC_FAIL: NextPort Module %d/%d/%d failed firmware image validation

Explanation NextPort BootStrap and Crash Monitor detected ana failed NextPort firmware CRC validation

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance,

open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_BS-3-INITSYS: %s

Explanation Failed NextPort BootStrap and Crash Monitor Initialization.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_BS-3-INVALID_FW: Invalid NextPort Firmware for %d/%d/%d

Explanation NextPort BootStrap and Crash Monitor detected aninvalid NextPort firmware

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_BS-3-INVALID_IDT: NextPort Module %d/%d/%d detected an invalid IDT

Explanation NextPort BootStrap and Crash Monitor detected aninvalid IDT

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

 $NP_BS-3-INVALID_MC_POST: NextPort Module <math display="inline">d/d/dd$ detected a module POST failure 0x

Explanation NextPort BootStrap and Crash Monitor detected ana module POST failure

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_BS-3-MEM_TEST_FAIL: NextPort Module %d/%d/%d memory test failed

Explanation NextPort BootStrap and Crash Monitor detected a failedNextPort module memory test

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_BS-3-MODULE_ACCESS_ERR: Failed to access NextPort module %d/%d/%d crash info

Explanation NextPort BootStrap and Crash Monitor failed to access crash information

Recommended Action No action is required.

Error Message

%NP_BS-3-NOMEM: %s

Explanation NextPort BootStrap and Crash Monitor Could not allocate memory for internal module database

Recommended Action No action is required.

 $NP_BS-3-NO_KEEPALIVE: NextPort module <math display="inline">d/d/d$ failed to respond to keepalive message

Explanation NextPort BootStrap and Crash Monitor detected a module failed to respond to keepalive message

Recommended Action No action is required.

Error Message

%NP_BS-3-NO_SUCH_MODULE: %s nonexisting NP module %d/%d/%d

Explanation NextPort BootStrap and Crash Monitor detected an internal database error

Recommended Action No action is required.

Error Message

%NP_BS-3-NULL_FW_PTR: NULL NextPort Firmware pointer for %d/%d/%d

Explanation NextPort BootStrap and Crash Monitor detected aNULL NextPort firmware pointer

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_BS-3-Q_FAILURE: NextPort Module %d/%d/%d control queue creation failure

Explanation NextPort BootStrap and Crash Monitor detected ancontrol queue creation failure

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%NP_BS-6-FW_DNLD_IN_PROGRESS: Module FW Download [dec]/[dec]/[dec] spe [dec] is in [chars] state

Explanation The NextPort module firmware download is in a Progress state.

Recommended Action No action is required.

Error Message

%NP_BS-6-MODULE_FW_DNLD: Module FW Download [chars] to NextPort module
[dec]/[dec]/[dec]

Explanation The NextPort module firmware is being downloaded from Flash memory.

Recommended Action No action is required.

Error Message

%NP_BS-6-MODULE_STARTED: NextPort module %d/%d/%d Started - %d.%d.%d.%d.%d

Explanation NextPort BootStrap and Crash Monitor successfully started module

Recommended Action No action is required.

Error Message

%NP_BS-6-MODULE_STOPPED: NextPort module %d/%d/%d Stopped

Explanation NextPort BootStrap and Crash Monitor stopped module

Recommended Action No action is required.

Error Message

```
%NP_CLIENT-2-FATAL: NP Client %s : %s (%d, %d)
```

Explanation NP Client software detected a critical programming error.

Recommended Action Record the output from the following commands: show tech, show log Provide this information to your technical support representative.

Error Message

%NP_CLIENT-3-ALLEXISTS: NP Client Previously Defined Software Element - %s: %s %s

Explanation The NP Client has detected a previously defined software element.

Recommended Action Try to reload the Cisco IOS software image on the affected card or platform. If the error persists, record the output from the following commands: show tech, show log Provide this information to your technical support representative.

```
%NP_CLIENT-3-INITFAIL: NP Client Initialization Failed - %s: %s %s
```

Explanation NP Client could not initialize memory needed to service one or more Network Processors.

Recommended Action This error may indicate that an incompatibility exists between the NP firmware and the associate IOS image. Try to reload the IOS image on the affected card or platform. If the error persists, record the output from the following commands: show tech, show log Provide this information to your technical support representative.

Error Message

```
%NP_CLIENT-3-INTF: %s (%s) on %s - %s if_number=%d
```

Explanation Interface NP Client detected an error.

Recommended Action Record the output from the following commands: show tech, show log Provide this information to your technical support representative.

Error Message

```
%NP_CLIENT-3-MAXEXCEED: NP Client Max Services Exceeded - %s: %s %s
```

Explanation The maximum number NP Client services have been exceeded.

Recommended Action Change the configuration to reduce the number of services configured. If the error persists, record the output from the following commands: show tech, show log Provide this information to your technical support representative.

Error Message

```
%NP_CLIENT-3-METADATA: %s failed: %s [%s] %s
```

Explanation Processing of the Metadata for the specified Network Processor failed. The specified Network Processor will fail to operate.

Recommended Action Try to reload the Network Processor microcode. If the error persists, record the output from the following commands: show tech, show log Provide this information to your technical support representative.

Error Message

```
%NP_CLIENT-3-NOMEM: Memory Allocation Failure - %s: %s %s
```

Explanation NP Client could not allocate required memory needed to service one or more Network Processors.

Recommended Action This error may indicate that more memory must be installed on the affected card or platform in order to service all the features and related entities enabled via the configuration. Try to reload the IOS image on the affected card or platform. If the error persists, record the output from the following commands: show tech, show log Provide this information to your technical support representative.

```
%NP_CLIENT-3-NOTFOUND: NP Client Software Element Not Found - %s: %s %s
```

Explanation The NP Client could not locate a required software element.

Recommended Action Try to reload the IOS image on the affected card or platform. If the error persists, record the output from the following commands: show tech, show log. Provide this information to your technical support representative.

Error Message

```
%NP_CLIENT-3-NOTSUP: NP Client Feature Not Supported - %s: %s %s
```

Explanation The NP Client does not support the specified feature.

Recommended Action Verify that the correct IOS image is loaded on the affected card or platform for the configured features. If the error persists, record the output from the following commands: show tech, show log Provide this information to your technical support representative.

Error Message

```
%NP_CLIENT-3-NPUNKNOWN: NP Client Unsupported NP - %s: %s %s
```

Explanation NP Client detected an unsupported NP.

Recommended Action Verify that the correct IOS image is loaded on the affected card or platform for the configured features. If the error persists, record the output from the following commands: show tech, show log Provide this information to your technical support representative.

Error Message

```
%NP_CLIENT-3-UNEXPECTED: NP Client Unexpected - [chars]: [chars] [dec]
[dec]
```

Explanation NP Client unexpected error condition.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech show log** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

%NP_CRASHINFO-2-OPEN_FAILED: Could not open crashinfo file [[chars]]

Explanation The file for writing crashinfo could not be opened. This is usually caused by the file system problem.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

Error Message

%NP_CRASHINFO-2-WRITE_FAILED: Could not write crashinfo file [[chars]]

Explanation Could not write crashinfo to the file. This is usually caused by the file system problem.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

Error Message

%NP_CRASHINFO-2-WRITING: Writing crashinfo file [[chars]]

Explanation NP detected a watchdog timeout. The crashinfo is collectedfrom problematic NP and stored in the location.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

%NP_DDSM-3-DIAL_STRING_TOO_LONG: [dec]/[dec]:DIGITAL_DIALSTRING_NTF string too long, len=[dec]

Explanation The NextPort Digital Data Services Manager received a dial string that was too long.

Recommended Action No action is required.

Error Message

%NP_DDSM-3-INVALID_CALL_TYPE: Invalid call type from DIGITAL_GET_LLC_CMD : [hex]

Explanation The specified outgoing call type is unsupported.

Recommended Action No action is required.

Error Message

%NP_DDSM-3-UNSUPPORTED_CALL_TYPE: Call type is either not set or not supported

Explanation The digital data call type is either not set or not supported

Recommended Action Copy the error message exactly as it appears on the console or in the system log and give it to your Cisco technical support representative.

Error Message

 $NP_DDSM-3-UNSUPPORTED_REVERSE_TELNET_CALL\colon HDLC$ digital call dial-out through reverse telnet is not supported

Explanation The NextPort Digital Data Service Manager does not support outgoing HDLC digital calls through reverse Telnet.

Recommended Action No action is required.

Error Message

```
%NP_DEV-2-INVREGINTR: Illegal Write on NP RMA Register: [hex], Data: [hex]
```

Explanation This is an illegal Write to an NP RMA Register. This is to debug NP Parity Error issue. Examine traceback and forward it to development team.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

```
: Non-recoverable Parity error detected on NP [dec], cause [dec] count [int] uqParityMask [hex], uqSRAMLine [hex], bRecov [dec], bRewr [dec] Total [dec]
```

Explanation A non-recoverable parity error detected for a Network Processor device component.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. If the problem persists, hardware may need to be replaced.

Error Message

%NP_DEV-3-ECC_DOUBLE: Double-bit ECC error detected on NP [dec], Mem [dec], SubMem [hex], SingleErr [dec], DoubleErr [dec] Count [dec] Total [dec]

Explanation Double-bit ECC error detected for a Network Processor device component.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. If the problem persists, hardware may need to be replaced.

Error Message

```
%NP_DEV-3-ERRINTR: Error caused by: [chars] on NP [dec]
```

Explanation Error in Network Processor device operation.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

```
%NP_DEV-5-INTRTHR: Interrupt: cause [dec] for NP([int]) throttled
```

Explanation Too many interrupts are being generated from Network Processor device

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

Error Message

```
%NP_DEV-6-ECC_SINGLE: Recovered from a single-bit ECC error detected on NP [dec],
Mem [dec], SubMem [hex], SingleErr [dec], DoubleErr [dec] Count [dec] Total [dec]
```

Explanation Recovered from a single-bit ECC error detected for a Network Processor device component.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. If the problem persists, hardware may need to be replaced.

Error Message

```
%NP_DSPLIB-3-INVALID_STATE: Invalid NP DSPLIB state ([dec]) at [chars] for port
([dec]/[dec])
```

Explanation The NextPort DSPLIB is in an invalid state at this time.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NP_EST-3-MSG_ERR: %s
```

Explanation EST detected an internal error

Recommended Action No action is required.

```
%NP_EST-6-CTRL_NAK_RSP: %s
```

Explanation EST Control No-Acknowledge Notification is sent to IOS to convey additional debug data regarding a NAK that occurred on the Control Queue.

Recommended Action No action is required.

Error Message

```
%NP_EST-6-DIAG_POST_NTF: %s
```

Explanation EST Diagnostic/POST Notification is sent to IOS to convey additional information about the power-on self-test or a diagnostic test result

Recommended Action No action is required.

Error Message

```
%NP_EST-6-RUNTIME_ERR_NTF: %s
```

Explanation EST Run-time Error Notification is sent to IOS to convey additional debug data that may help to identify the cause of the error.

Recommended Action No action is required.

Error Message

```
%NP_MD-0-NOHWIDBS: Cannot allocate interface Async%d/%02d
```

Explanation Allocation of interface structure failed. Either there is not enough memory or the maximum number of interfaces was exceeded

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%NP_MD-0-NOMEMORY: Cannot allocate %d bytes of memory for %s
```

Explanation The system failed to allocate an important data structure due to the lack of memory

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the commands and your pertinent troubleshooting logs. (show mem).

Error Message

```
%NP MD-0-NOPAKS: TTY %s: Cannot allocate %s
```

Explanation An important buffer cannot be allocated due to the shortage of packet memory.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%NP MD-0-NOTTYS: Cannot allocate TTY%d (%d/%02d)
```

Explanation Allocation of TTY structure failed. Either there is not enough memory or the TTY number is too big

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

 $NP_MD-0-NO_MODULE_ELEMENTS: Cannot bring up the module <math display="inline">d/dd\$ due to lack of module elements

Explanation NextPort Modem Driver cannot allocate an important data structure, called module element which is necessary to bring up the module. This should not normally happen and possibly indicates an error condition

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance,

open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_MD-0-NO_SUCH_LINE: Attempt to %s a data channel on the unexisting line %d/%d

Explanation An internal software error occured that probably resulted in corrupted modem database

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

 $NP_MD-0-NO_SUCH_MODEM$: Attempt to %s a data channel on the unexisting modem %d/%d

Explanation An internal software error occured that probably resulted in corruptedmodem database

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_MD-0-NO_SUCH_SLOT: Slot %d is not present in the system

Explanation An internal software error occured, that possibly resulted in corrupted slot database.

%NP_MD-0-SLOT_ALREADY_PRESENT: Slot %d is already present in the system

Explanation An internal software error occured, that possibly resulted in corrupted slot database.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

 $NP_MD-1-UNKNOWN_ESCAPE_CHAR\colon TTY \s:$ Attempt to set an unknown special character (type %d) to #02x

Explanation NextPort Modem Driver received a request for hardware detection of an unknown type of a special character due to an internal software error

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_MD-3-BADENCAP: Unknown encapsulation %d on interface %s

Explanation A software error occurred resulting in an unknown encapsulation type on the interface specified by the error message.

%NP_MD-3-CONTIGUOUS: Contiguous packet sent for transmit

Explanation A software error occurred resulting in an unexpected packet being set up for transmission and the packet was dropped by the NextPort Modem Driver

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_MD-3-DATA_CHAN_RX_OVERFLOW: Too many buffers (%d) rxd for port %d

Explanation NextPort Module sent more buffers than is allowed for this channel

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_MD-3-DATA_QUEUE_SEND_FAIL: Could not send to data queue for port %d, inflight tx buffers %d

Explanation NextPort Modem Driver could not send buffer to Interface driver

 $NP_MD-3-MODEM_SLOT_CREATION_FAIL\colon Modem slot structure for slot %d could not be created$

Explanation NextPort modem driver could not create the modem slot structure which is required for modem services of this card

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_MD-3-NOTXPAK: Static transmit paktype unavailable

Explanation A software structure was found in an unexpected state during run-time for the indicated modem.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_MD-3-NO_SEED_BUFFER: No buffer to seed data queue for module %d/%d/%d

Explanation NextPort Modem Driver could not obtain a buffer whilst trying to seed the module data queue. Due to packet memory shortage

```
%NP_MD-3-NPMODULEPROC: [chars]
```

Explanation The system failed to create the NextPort module-up process.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NP_MD-3-NPMODULEQ: [chars]
```

Explanation The system failed to create the watched queue for the NextPort module-up process.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NP_MD-3-NPMODULESTRUCT: [chars]
```

Explanation The system failed to allocate chunk memory for the NextPort module, or the system failed to allocate memory for the watched queue entry for the process.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NP_MD-3-NP_PROC_CHUNK: [chars]
```

Explanation The system failed to create the queue chunk for the NextPort module-up process.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NP_MD-3-NULL_PTR: [chars] is NULL in [chars] for port [dec]
```

Explanation An unexpected null pointer was encountered at the location specified in the error message.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at

http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%NP_MD-3-OUT_OF_RANGE_VALUE: [chars] value:[dec] is out of range
```

Explanation NextPort Voice Service Manager received an Invalid/Out of Range value.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%NP_MD-3-RETURN_DATA_BUFF_FAIL: Failed to return data buffer for port %d
```

Explanation Call to NextPort Interface Driver to replenish data buffer for this channel failed

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%NP_MD-3-RTSLOW: TTY %s: RTS is incorrectly deasserted; reasserting now
```

Explanation A software error occurred resulting in an invalid state for the RTS modem signal

%NP_MD-3-SEED_BUFFER_FAIL: Could not seed data queue for module %d/%d/%d

Explanation NextPort Modem Driver could not seed the data queue with buffers

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_MD-3-TXQUEUE_EMPTY: TTY %s: No buffers available to set up the transmit queue

Explanation A software error occurred resulting in an unexpected exhaustion of the pool of data buffers used by the modem drivers.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_MD-3-TX_INBAND_MSG_FAILURE: Failed to send inband message for TTY %s

Explanation Call to send inband message on data queue failed

 $NP_MD-3-UNKNOWN_INBAND:$ TTY %s: Unknown NextPort in-band message (msg_id 04x) received

Explanation NextPort Modem driver received an unknown message from a NextPort module. This can happen if new firmware is used with an obsolete version of IOS

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%NP_MD-6-MODULE_DOWN: NextPort module %d/%d/%d down
```

Explanation NextPort Modem Driver detected a module going down

Recommended Action No action is required.

Error Message

```
%NP_MD-6-MODULE_UP: NextPort module %d/%d/%d up
```

Explanation NextPort Modem Driver detected a module coming up

Recommended Action No action is required.

Error Message

```
%NP_MD-6-SLOT_INSERTED: Slot %d (%d ports max) inserted
```

Explanation NextPort Modem driver detected a slot being inserted in the system. During the startup all slots that are present in the system are treated as being inserted

Recommended Action No action is required.

Error Message

```
%NP_MD-6-SLOT_REMOVED: Slot %d removed
```

Explanation Slot has been removed from the system

Recommended Action No action is required.

%NP_MM-3-BAD_FILE: Invalid NP module image(at state [chars]) [dec]/[dec] [chars]

Explanation NextPort Module Manager detected invalid NP module image.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_MM-3-COUNTRY_CODE_FAILURE: Module country code failure %d/%d/%d

Explanation NextPort Module Manager failed to set the country code

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_MM-3-DATA_Q_FAILED: Failed to create Data Q for NP module %d/%d/%d

Explanation NextPort Module Manager failed to create Data Queue

```
NP_MM-3-INVALID_ACK_RSP: Unsupported module ACK response d/d/d: msg len = d, session ID = d, msg tag = d, msg ID = d, cmd msg ID = d, result code = d
```

Explanation NextPort Module Manager received an unsupported message response

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%NP_MM-3-INVALID_NPADDRESS: Invalid NP_ADDRESS %d/%d/%d/%d - %s
```

Explanation NextPort Module Manager detected invalid NP_ADDRESS

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%NP_MM-3-INVALID_RSP: Unsupported module response %d/%d/%d: msg len = %d, session ID = %d msg tag = %d, msg ID = %d
```

Explanation NextPort Module Manager received an unsupported message response

%NP_MM-3-INVALID_STATE: Invalid NP module state(%s) %d/%d/%d - %s

Explanation NextPort Module Manager detected invalid NP module state

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_MM-3-MEM_ERR: Failed to allocate control message buffer for NP module d/d/d -

Explanation NextPort Module Manager failed to allocate control message buffer

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_MM-3-MODULE_CRASH: Module Crash detected %d/%d/%d: state = %d, cause code = %d

Explanation NextPort Module Manager detected a crashed module

%NP_MM-3-RESTART_EXCEEDED: Module exceeded restart threshold %d/%d/%d

Explanation NextPort Module exceeded the restart threshold

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_MM-3-RUNTIME_ERR: Module Run Time Error %d/%d/%d : recovery = 0x%x, error = 0x%x

Explanation NextPort Module Manager received a module run time error

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_MM-3-SEND_FAILED: Failed to send %s message to NP module %d/%d/%d

Explanation NextPort Module Manager failed to send control message

%NP_SIGLIB-3-CPTONE_FORMAT_FAIL: Format of cp tone failed for tone-id [dec], port
[dec]/[dec]

Explanation Formatting the call processing tone message to the NextPort module has failed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%NP_SPE_DS-3-NOMEMORY: Cannot allocate %d bytes of memory for %s
```

Explanation The system failed to allocate an important data structure due to the lack of memory.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the commands and your pertinent troubleshooting logs. (show mem).

Error Message

```
%NP_SPE_DS-3-SPE_DNLD_FAIL: SPE %d/%d/%d/%d: %s
```

Explanation SPE download code failed - download aborted.

Recommended Action No action is required.

Error Message

```
%NP_SPE_DS-3-SPE_DNLD_INIT_FAIL: %s
```

Explanation SPE download code failed to initialise - SPE download will fail

Recommended Action No action is required.

```
%NP_SSM-0-NOMEMORY: Cannot allocate %d bytes of memory for %s
```

Explanation The system failed to allocate an important data structure due to the lack of memory.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the commands and your pertinent troubleshooting logs. (show mem).

Error Message

```
%NP_SSM-3-INVALID_HANDLE: SSM(%d/%d): Invalid Session/Service Instance Handle
```

Explanation Session and Service Manager Received failed to obtain its instance handle for the slot/port.

Recommended Action No action is required.

Error Message

```
%NP_SSM-3-INVALID_MSG: SSM : Invalid Session/Service Message, ID = 0x%x
```

Explanation Session and Service Manager Received an invalid message from the NextPort Message Dispatcher.

Recommended Action No action is required.

Error Message

```
NP_SSM-3-RUNTIME_ERROR: SSM(%d/%d): Session Runtime Error Code = %d, Recovery Action = %d
```

Explanation Session and Service Manager Received a Runtime Error for the slot and port.

Recommended Action No action is required.

Error Message

```
NP_SSM-6-INVALID_STATE: Invalid NP SSM state ([chars]) with event [chars] for slot/port ([dec]/[dec])
```

Explanation NextPort SSM was in an invalid state for an incoming event.

Recommended Action No action is required.

%NP_SSM-6-NULL_SSM_INFO: NULL SSM Info Handle for slot %d, port %d

Explanation NextPort Session and Service Manager failed to obtain a controlinformation handle for the indicated slot and port numbers

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_SSM-6-NULL_VDEV_COMMON: NULL Vdev Common Handle for slot %d, port %d

Explanation NextPort Session and Service Manager failed to obtain a Voice Device Information handle for the indicated slot and port numbers

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_UCODE-3-INVALID_FILE: NP microcode %s for device %s is invalid (%s)

Explanation The file containing the microcode for an NP is not specified or not accessible. This could be due to an invalid configuration or because the microcode is missing in this image.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%NP_VPD-0-NOHWIDBS: Cannont create hwidb for slot [dec]

Explanation The allocation of an interface structure has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NP_VPD-0-NOMEMORY: Cannot allocate [dec] bytes of memory for [chars]

Explanation The system has failed to allocate an important data structure because of a lack of memory.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the show mem command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show mem command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_VPD-0-NO_MODULE_ELEMENTS: Cannot bring up the module [dec]/[dec]/[dec] due to lack of module elements

Explanation The NextPort Voice Packet driver cannot allocate an important data structure, which is called the module element. The module element is necessary to bring up the module.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NP_VPD-0-NO_SUCH_LINE: Attempt to [chars] a data channel on the unexisting line [dec]/[dec]

Explanation An internal software error has occurred that probably resulted in a corrupted voice database.

%NP_VPD-0-NO_SUCH_SLOT: Slot [dec] is not present in the system

Explanation An internal software error has occurred that possibly resulted in a corrupted slot database.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NP_VPD-0-NO_SUCH_VOICE_PORT: Attempt to [chars] a data channel on the unexisting voice port [dec]/[dec]

Explanation An internal software error has occurred that probably resulted in a corrupted voice database.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NP_VPD-0-SLOT_ALREADY_PRESENT: Slot [dec] is already present in the system

Explanation An internal software error has occurred that possibly resulted in a corrupted slot database.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NP_VPD-3-BADENCAP: Unknown encapsulation [dec] on interface [chars]

Explanation A software error resulted in an unknown encapsulation type on the interface specified by the error message.

%NP_VPD-3-CONTIGUOUS: Contiguous packet sent for transmit

Explanation A software error resulted in an unexpected packet being set up for transmission. The packet was dropped by the NextPort Voice Packet driver.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NP_VPD-3-DATA_CHAN_RX_OVERFLOW: Too many buffers ([dec]) rxd for port [dec]

Explanation The NextPort Module has sent more buffers than is allowed for this channel.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NP_VPD-3-DATA_QUEUE_SEND_FAIL: Could not send to data queue for port [dec],
inflight tx buffers [dec]

Explanation The NextPort Voice Packet driver could not send a buffer to the interface driver.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NP_VPD-3-FAIL_ALLOC_VC_TBL: Failed to allocate vchan instance table for slot [dec]

Explanation The RSC has failed to allocate a VCHAN instance table.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NP_VPD-3-FIRST_DEV_RANGE: First device [dec] is out of range

Explanation The first device is out of range.

%NP_VPD-3-MISSING_SWIDB: Missing SWIDB for slot [dec]. [chars]

Explanation The SWIDB was expected to already exist but does not.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NP_VPD-3-NORXPAK: Static receive paktype unavailable

Explanation NextPort was unable to allocate a packet type.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NP_VPD-3-NOTXPAK: Static transmit paktype unavailable

Explanation A software structure was found in an unexpected state during run time for the indicated modem.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NP_VPD-3-NO_SEED_BUFFER: No buffer to seed data queue for module
[dec]/[dec]/[dec]

Explanation Because of a shortage of packet memory, the NextPort Voice Packet driver could not obtain a buffer while it tried to seed the module data queue.

%NP_VPD-3-RETURN_DATA_BUFF_FAIL: Failed to return data buffer for port [dec]

Explanation A call to the NextPort Interface driver to replenish the data buffer for this channel has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NP_VPD-3-SEED_BUFFER_FAIL: Could not seed data queue for module [dec]/[dec]/[dec]

Explanation The NextPort Voice Packet driver could not seed the data queue with buffers.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NP_VPD-3-TXQUEUE_EMPTY: TTY [chars]: No buffers available to set up the transmit queue

Explanation A software error has occurred that resulted in an unexpected exhaustion of the pool of data buffers used by the NextPort Voice Packet drivers.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NP_VPD-3-VPD_POOL_CREATE_FAIL: Failed to create particle pool

Explanation NextPort failed to create a particle pool.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information. NP_VSM Messages

Recommended Action The following are NextPort Voice Service Manager (VSM) messages.

Error Message

%NP_VPD-6-BUFFER_SHORTAGE: Buffer shortages for [dec] voice ports during Nextport module bring-up

Explanation The NextPort Voice Packet driver has detected a buffer shortage when the module was brought up.

Recommended Action No action is required.

%NP_VPD-6-MODULE_DOWN: NextPort module [dec]/[dec]/[dec] down

Explanation The NextPort Voice Packet driver has detected a module that failed.

Recommended Action No action is required.

Error Message

```
%NP_VPD-6-MODULE_UP: NextPort module [dec]/[dec]/[dec] up
```

Explanation The NextPort Voice Packet driver has detected a module that has become available.

Recommended Action No action is required.

Error Message

```
%NP_VPD-6-SLOT_INSERTED: Slot [dec] ([dec] ports max) inserted
```

Explanation The NextPort Voice Packet driver has detected a slot that is being inserted in the system. All slots that are present are treated as if they are being inserted in the system during the startup procedure.

Recommended Action No action is required.

Error Message

```
%NP_VPD-6-SLOT_REMOVED: Slot [dec] removed
```

Explanation A slot has been removed from the system.

Recommended Action No action is required.

Error Message

%NP_VSM-3-INVALID_STATE_NTF: NP-VSM([dec]/[dec]): Invalid State Notification
Received service [hex]

Explanation The NextPort VSM received an SSM state notification, which it is not supposed to receive, on the specified slot and port.

%NP_VSM-3-MALLOC_FAILURE: No memory is available to build session information for slot [dec]

Explanation The NextPort VSM does not have sufficient memory available to build some internal data structure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NP_VSM-3-OUT_OF_RANGE_VALUE: [chars] value: [dec] is out of range
```

Explanation The NextPort VSM has received an invalid or out-of-range value.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NP_VSM-3-PROT_VIOLATION: [chars] Protocol Violation received on slot [dec] port [dec]

Explanation The NextPort VSM has received a protocol violation.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NP_VSM-4-INVALID_COMBINATION: Invalid combination - [chars]
```

Explanation The system has encountered an invalid combination of parameters.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

NRP Messages

The following are Network Routing Processor (NRP) messages.

```
%NRP-1-INITFAIL: msgtxt_initfail
```

Error Message

```
%NRP-1-NOMEMORY: msgtxt_nomemory
```

Error Message

```
%NRP-3-BADUNIT: msgtxt_badunit
```

Error Message

```
%NRP-3-CONFIG: Recommended port adapter configuration exceeded
```

Error Message

```
%NRP-3-IONOTO: Interfaces discovered in non-zero slot %d
```

Error Message

```
%NRP-3-IPC: [chars] [chars]
```

Explanation An IPC error has occurred. The details of what was attempted and what went wrong will be printed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Copy down the configuration of the router along with any other relevant information and contact your Cisco technical support representative for assistance.

%NRP-3-NOMAC: Can't allocate MAC address for interface %u/%u

Error Message

%NRP-3-TXOUTERR: Unable to write a message to NRP Mailbox, slot %d

Error Message

%NRP-4-COOKIE: Corrupt or missing MAC address cookie using random base %e

Error Message

%NRP-4-INVALIDSLOT: NRP not found in slot %d, subslot %d

Error Message

%NRP-4-NOCPUVER: Invalid CPU revision level, assuming revision 1

Error Message

%NRP-4-PCIVALID: PCI activation failed, bay %d, 0x%x

Error Message

%NRP-4-SLAVE_DOWN: NRP-REDUNDANCY Secondary NRP in slot %d, went down.

Explanation The Primary NRP lost communication with the redundant NRP.

Error Message

%NRP-5-NO_DBS_SUPPORT: DBS is not supported

Explanation Dynamic Bandwidth Selection, DBS, is not supported by Network Routing Processor version. Entering the dbs enable command will have no effect on the interface.

Recommended Action No action is required.

Error Message

%NRP-5-SLAVE_UP: NRP-REDUNDANCY Secondary NRP in slot %d, came up

Explanation The Redundancy NRP came up and established communication with the Primary NRP.

NRP2 Messages

The following are Network Route Processor, type 2 messages.

%NRP2-1-INITFAILED: I82543([dec]/[dec]), initialization failed

Explanation NRP2 GE interface initialization has failed. The reason for this failure is unknown.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2-2-INTBEFOREINIT: Attempt to enable/disable [chars] interface interrupts before initialization complete

Explanation The interrupt code has detected an error in the initialization of the interface.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NRP2-2-RESET_FAILED: PCI device reset failed to complete - reloading

Explanation The PCI device reset transition has failed to complete in the expected time. This condition indicates a fatal hardware error condition.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NRP2-2-RESET_STUCK: PCI device reset done bit stuck - reloading

Explanation The PCI device reset done bit was asserted before a reset was started. This condition indicates a fatal hardware error condition.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

%NRP2-4-SLAVE_DOWN: NRP2-REDUNDANCY Secondary NRP2 in slot [dec], went down.

Explanation The primary NRP2 lost communication with the redundant NRP2.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%NRP2-5-SLAVE_UP: NRP2-REDUNDANCY Secondary NRP2 in slot [dec], came up
```

Explanation The redundant NRP2 came up and established communication with the primary NRP2.

Recommended Action No action is required.

Error Message

```
%NRP2EHSA-3-CONFIG_SYNC: [chars]
```

Explanation An EHSA configuration synchronization error has occurred. The details about what was attempted and what went wrong are shown in the error message text.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Copy down the system configuration along with any other relevant information. Contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%NRP2EHSA-3-EHSA_ALARMS: [chars] (slot [dec]/[dec])
```

Explanation An EHSA alarm assertions error has occurred. The details about what was attempted and what went wrong are shown in the error message text.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Copy down the system configuration along with any other relevant information. Contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%NRP2EHSA-3-FSM: [chars]
```

Explanation An EHSA Finite State Machine error has occurred. The details about what was attempted and what went wrong are shown in the error message text.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Copy down the system configuration along with any other relevant information. Contact your Cisco technical support representative and provide the representative with the gathered information.

```
%NRP2EHSA-3-GENERAL: [chars]
```

Explanation An EHSA error has occurred. The details about what was attempted and what went wrong are shown in the error message text.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Copy down the system configuration along with any other relevant information. Contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%NRP2EHSA-3-PEER_MONITOR: [chars] (slot [dec])
```

Explanation An EHSA peer monitor error has occurred. The details about what was attempted and what went wrong are shown in the error message text.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Copy down the system configuration along with any other relevant information. Contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%NRP2EHSA-5-PEER_MONITOR_EVENT: [chars] ([chars][chars]([dec]))
```

Explanation An EHSA peer monitor event has occurred and been reported.

Recommended Action Analyze the report to find out the reason for a switch-over.

Error Message

```
NRP2_NVMANAGE-4-FILE_OPEN_RD_ERROR: NRP2 slot [dec]/[dec] unable to open file [chars] for reading
```

Explanation The NRP-2 specified in the error message is unable to locate an NVRAM image. Most likely, the specified image is not present or this is the first time an NRP-2 has been installed in this slot. The NRP-2 NVRAM will revert to its default values.

Recommended Action Verify that there is a functioning disk in the NSP.

Error Message

```
NRP2_NVMANAGE-4-FILE_OPEN_WR_ERROR: NRP2 slot [dec]/[dec], unable to open file [chars] for writing
```

Explanation The identified NRP-2 is unable to write an NVRAM image. Most likely, the NSP disk is either not present or too full to allow writing this file. Changes to the NRP-2 NVRAM parameters will not be saved.

Recommended Action Verify that there is a functioning disk in the NSP and remove any unneeded files.

%NRP2_NVMANAGE-4-FILE_READ_ERROR: NRP2 slot [dec]/[dec], error while reading file [chars]

Explanation The identified NRP-2 is unable to read its NVRAM image. NRP-2 NVRAM will revert to its default values.

Recommended Action Verify that there is a functioning disk in the NSP.

Error Message

%NRP2_NVMANAGE-4-FILE_WRITE_ERROR: NRP2 slot [dec]/[dec], error while writing file [chars]

Explanation NRP-2 NVRAM data is stored on local NSP disk space. The NRP2 specified in the error message did not have its NVRAM saved to disk because of a file error. Changes to the NRP-2 NVRAM parameters will not be saved.

Recommended Action Verify that there is a functioning disk in the NSP and remove any unneeded files.

Error Message

 $NRP2_NVMANAGE-4-NO_RD_MEMORY: NRP2 slot [dec]/[dec], unable to allocate memory while reading file [chars]$

Explanation The specified NRP-2 did not have its NVRAM initialized because the system ran out of memory during the read operation. NRP-2 NVRAM will revert to its default values.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

 $NRP2_NVMANAGE-4-NO_WR_MEMORY: NRP2 slot [dec]/[dec], unable to allocate enough memory while writing file [chars]$

Explanation NRP-2 NVRAM data is stored on local NSP disk space. The NRP-2 specified in the error message did not have its NVRAM saved to disk because the system ran out of memory during the write operation. Changes to the NRP-2 NVRAM parameters will not be saved.

```
%NRP2_SE64-3-LLD_BAD_BCS: The BCS [dec] out of rang ([dec], [dec])
```

Explanation The VBR BCS is out of range.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-LLD_BAD_MPH_COUNT: Inconsistent mp holder count: [dec] [dec]
```

Explanation The MP holder count is too large.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2_SE64-3-LLD_BAD_MPH_DESTROY: mp holder destroy count incorrect: [dec] [dec] [dec]

Explanation The MP holder destroy count is incorrect.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-LLD_BAD_PCR: The PCR [dec] larger than [dec]
```

Explanation The VBR PCR is out of range.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-LLD_BAD_RX_POOL_SIZE: Rx pool size [int], too big
```

Explanation The requested Rx pool size is greater than 32K.

%NRP2_SE64-3-LLD_BAD_RX_RANGE: Particle out of boundary

Explanation An SAR particle is out of boundary.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-LLD_BAD_SCR: The SCR [dec] out of rang ([dec], [dec])
```

Explanation A VBR SRC is out of range.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2_SE64-3-LLD_BAD_VC_DESC: Illegal vcd on get rx cell count: [dec], value is invalid

Explanation An illegal VC descriptor was given as an argument.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-LLD_BAD_VPI_VCI_BITS: Invalid vpi_bits ([dec]) or vci_bits ([dec])
```

Explanation VPI bits or VCI bits are out of range.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-LLD_CLOSE_VC_TIMEOUT: vc closing timeout
```

Explanation A VBR VC closing timeout error has occurred.

%NRP2_SE64-3-LLD_DEVNOTFOUND2: Failed to find SE64 : ID : [hex], Control: [hex],
Done: [hex]

Explanation The system has tried and failed to find the SE64 device on the PCI bus. This message marks the system's final attempt to find the SE64 device on the PCI bus.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2_SE64-3-LLD_INVALID_VC: Invalid VC descriptor [dec]

Explanation An error involving an invalid VC descriptor in closing the VC has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2_SE64-3-LLD_MPHOLDERNONZERO: Free mp holder holder not zero, current count: [dec]

Explanation The MP free holder pool was expected to be empty; however, the pool has a nonzero count.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

 $NRP2_SE64-3-LLD_MPHOLDER_DQADR:$ vc dequeued mp holder addr mismatch, vcd [dec], holder ba, [hex], ba [hex]

Explanation The dequeued MP buffer holder address does not match the buffer holder address.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2_SE64-3-LLD_MPHOLDER_DQNULL: mp holder tail is null on vc dequeue, vcd; [dec]

Explanation The MP holder tail should not be null during the checked dequeue.

 $NRP2_SE64-3-LLD_MPHOLDER_NQNULL: mp holder tail is null on vc enque, vcd; [dec], head: <math display="inline">0x08x$

Explanation An attempt to enqueue an MP holder has found an empty tail.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-LLD_MP_HOLDER_ERR: [chars]
```

Explanation An error in LLD packet or particle queue integrity has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2_SE64-3-LLD_NOFREEMPHOLDER: No free holder was available, current count: [dec]

Explanation An MP free holder pool was empty.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
NRP2\_SE64-3-LLD\_NO\_MEM: No memory for [chars]
```

Explanation The system has run out of memory.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-LLD_NVCI_INVALID_VPI: Undefined VPI bits: VPI : [dec]
```

Explanation The number of VPI bits are not supported by the system.

%NRP2_SE64-3-LLD_PARALIGN: Particle not aligned to 2k boundary [hex]

Explanation SE64 requires that Rx particles be aligned to 2k.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2_SE64-3-LLD_PAROCCUPIED: Particle slot occupied upon return: [dec]

Explanation A particle slot was unexpectedly occupied during its return.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2_SE64-3-LLD_PARRANGE: Particle out of range: [dec] [dec]

Explanation An Rx particle index is outside the expected range of values.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2_SE64-3-LLD_RXPCLR: RXP bit already clr at index: [dec]

Explanation The SE64 Rx pool own bit was unexpectedly cleared upon buffer return.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2_SE64-3-LLD_RXPKT_BADDSCDEX1: Bad Rx descriptor index: [dec]

Explanation SE64 has returned a bad index for an RX VC descriptor.

```
%NRP2_SE64-3-LLD_RXPKT_NULLPH: NULL RX particle header [hex]
```

Explanation A null particle header has been found at the index specified in the error message.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-LLD_RXPKT_POOLID: Bad Rx Pool ID : which [dec], poolid [dec]
```

Explanation SE64 has returned an invalid pool ID.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-LLD_RXPKT_RPTCODE: Bad Rx report type code: code [dec]
```

Explanation SE64 has returned an invalid Rx report type code.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-LLD_RXPKT_SMCODE: Bad Rx State Machine return code: which [dec]
```

Explanation SE64 Rx state machine has returned an invalid code.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2_SE64-3-LLD_RXVCSM_BADIN: Invalid input to RX VC State Machine: Current State [chars] Input [dec]

Explanation There was an unexpected input to the Rx VC SM.

```
%NRP2_SE64-3-LLD_RX_DESC_ERR: [chars]
```

Explanation A SAR Rx descriptor error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-LLD_RX_OFFSET_NOT_MATCH: Unusable RX buffer offset [dec]
```

Explanation The Rx VC has not closed while it was trying to set up a VC.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-LLD_RX_VC_NOT_CLOSE: VC not closed. Rx desc ind [dec]
```

Explanation A VC could not be set up because the Rx VC was not closed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-LLD_SAR_HW_ERR: SAR hardware error
```

Explanation The SAR system control register has returned all ones. Initialization has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-LLD_SHAPER_ERR: [chars]
```

Explanation A SAR shaper error has occurred.

```
%NRP2_SE64-3-LLD_SHAPER_NOT_SET: Shaper [dec] is not setup
```

Explanation The shaper specified in the error message is not set up.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-LLD_SNDBUF_ALIGN2K: Buffer is not aligned to 2k
```

Explanation The Tx buffer is not aligned on 2k.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2_SE64-3-LLD_SNDPAK_ALIGN: send packet mis-aligned: vcd [dec], buffer_base [hex]

Explanation The Tx packet length is misaligned.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2_SE64-3-LLD_SNDPAK_LEN0: send packet length is zero: vcd [dec], data_block [hex]

Explanation The packet length is expected to be nonzero but was detected as being zero.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-LLD_SNDPAK_NOMPHOLDER: No mp holder available: vcd [dec]
```

Explanation A free MP holder was not available for a Tx packet.

%NRP2_SE64-3-LLD_SNDPAK_SARNOTREADY: SAR not ready during packet TX : vcd [dec]

Explanation SAR was not ready and could not accept a Tx buffer during a packet transfer.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2_SE64-3-LLD_SNDPAK_VCDMT: send packet vc desc null: vcd [dec]

Explanation The Tx packet VC descriptor was empty when it should have contained a non-null value.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2_SE64-3-LLD_SNDPAR_ALIGN: send particle mis-aligned: vcd [dec], buffer_base [hex]

Explanation A Tx particle length is misaligned.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2_SE64-3-LLD_SNDPAR_LEN0: send particle length is zero: vcd [dec], data_block [hex]

Explanation A Tx particle length is expected to be nonzero but was detected as being zero.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2_SE64-3-LLD_SNDPAR_NOMPHOLDER: No mp holder available: vcd [dec]

Explanation A free MP holder was not available for a Tx particle.

%NRP2_SE64-3-LLD_SNDPAR_SARNOTREADY: SAR not ready during particle TX : vcd [dec]

Explanation SAR was not ready and could not accept a new buffer during an attempted particle transfer.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2_SE64-3-LLD_SNDPAR_VCDMT: send particle vc desc null: vcd [dec]

Explanation The Tx particle VC descriptor was empty when it should have contained a non-null value.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-LLD_TXRPT_DSCDEX: Bad Tx report descr index: index [dec]
```

Explanation SE64 returned an invalid Tx descriptor index.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-LLD_TXRPT_NOBUF: Tx report buffer mp holder not found: buf_addr [hex]
```

Explanation The system could not find an MP holder for the returned buffer.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-LLD_TX_DESC_ERR: [chars]
```

Explanation A SAR Tx descriptor error has occurred.

```
%NRP2_SE64-3-LLD_VCD_NOT_MATCH: vcd does not match record:[dec], pass [dec]
```

Explanation The VCD did not match while the system was closing the VC.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-LLD_VC_NOT_SETUP: VC not setup [dec]
```

Explanation The Rx VC was not closed when the system was trying to set up a VC.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-ULD_BADVC: [chars] bad vcd [dec] packet - [hex] [hex] [hex] [hex]
```

Explanation A packet has been received on a nonexistent VC.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-ULD_BAD_BUF_TO_VCD: Failed buffer to VCD translation [dec]
```

Explanation The translation table contains an invalid entry.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-ULD_BAD_RX_POOL: [dec] [dec]
```

Explanation An unexpected Rx particle pool count has occurred.

```
%NRP2_SE64-3-ULD_CHANGE_VC_ENCAP_FAILED: VC([dec]) Encap not changed
```

Explanation The VC encapsulation has not been changed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-ULD_DUP_RXP: [hex]
```

Explanation A duplicate RXP entry was encountered.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-ULD_ILLEGAL_EXEC: Illegal exec [dec]
```

Explanation Unexpected code was executed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-ULD_ILLEGAL_TX_PAK: Illegal TX packet type: [chars]
```

Explanation An illegal packet type was passed on to the LLD.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-ULD_INVALID_VCI: VC([dec]/[dec]) VCI too large
```

Explanation The VCI is too large.

%NRP2_SE64-3-ULD_INVALID_VPI: VC([dec]/[dec]) VPI too large

Explanation The VPI is too large.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2_SE64-3-ULD_MALLOCFAIL: Malloc Failure: [chars]

Explanation Memory allocation of a data structure has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2_SE64-3-ULD_NEG_TX_AVAIL: Negative internal tx buffer available resources [dec]

Explanation The internal Tx buffer available resources were found to have a negative value.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NRP2_SE64-3-ULD_NO_TXPAK_RES: Too many VCs: no TX resources remaining for VBR traffic on vcd [dec], max VCs is [dec]

Explanation The number of configured VCs has consumed all Tx resources.

Recommended Action Enter the shutdown and no shutdown commands to restart the interface and configure fewer VCs.

Error Message

%NRP2_SE64-3-ULD_OUTPUT_VC_THROTTLE: Output VC Throttled: VCD = [dec]

Explanation An output VC was throttled.

```
%NRP2_SE64-3-ULD_POOLFAIL: Pool Create Failure: [chars]
```

Explanation The creation of a buffer or particle pool has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-ULD_SAR_REV: Unsupported SAR [hex]
```

Explanation The SAR revision is not supported in this image.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-ULD_UNDERFLOW1: [dec] [dec] [dec] [dec] [dec]
```

Explanation A global statistics counter has underflowed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-ULD_UNDERFLOW2:
```

Explanation A per-VC statistics counter has underflowed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
NRP2\_SE64-3-ULD\_VCUP: VCD = [dec]
```

Explanation A VC setup has been requested for a VC that is already up.

```
%NRP2_SE64-3-ULD_VC_DELETED: [chars] vcd [dec] is deleted
```

Explanation The system is transmitting a packet on a nonexistent VC.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-ULD_VC_SETUP_QOS: Illegal QOS for vcd [dec] setup
```

Explanation An illegal QoS has been encountered during the setup for a VC.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NRP2_SE64-3-ULD_VC_TEARDOWN_QOS: Illegal QOS for vcd [dec] teardown
```

Explanation An illegal QoS has been encountered during the removal of a VC.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
NRP2\_SE64-4-LLD\_DEVNOTFOUND1: Can't find SE64 : ID : [hex], Control: [hex], Done: [hex]
```

Explanation The system could not find the SE64 device on the PCI bus.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

NSE Messages

The following are network services engine messages.

%NSE-3-BAD_TUNNEL_MAGIC: Incorrect tunnel structure signature in fuction [chars]: tp=[hex] magic=[hex].

Explanation A pointer in Cisco IOS software has become corrupted and is not pointing to the correct part of Cisco IOS software. This pointer mismatch may be caused by high VPN session loads. This condition can cause a router trap and can cause the router to be reloaded.

Recommended Action Manually reload the router as soon as possible. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NSE-3-BAD_TUNNEL_POINTER: Pointer mismatch in fuction [chars]: tp=[hex]
tunnel=[hex] toaster_tunn[[dec]]=[hex].
```

Explanation A pointer in Cisco IOS software has become corrupted and is not pointing to the correct part of Cisco IOS software. This pointer mismatch may be caused by high VPN session loads. This condition can cause a router trap and can cause the router to be reloaded.

Recommended Action Manually reload the router as soon as possible. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NSE-3-EREVENT: [chars]
```

Explanation Sanity check for Cisco Express Forwarding update event failed. System may reach the limitation of hardware assistance engine, and Cisco Parallel eXpress Forwarding engine may not function properly.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NSE-3-NULL_ACL_BASE_POINTER: Attempt to set ACL base address to null. Update aborted.

Explanation An attempt has been made to set the PXF ACL base address to a null value. This condition results in PXF exceptions and eventually results in the disabling of the PXF. The base address has not been updated.

Recommended Action Make a change in the access list that forces a reevaluation of the ACL data.

%NSE-3-QUEUEHUNG: QoS queue hung on interface %s.

Explanation The system was unable to close down the QoS support in PXF for the interface cleanly. Problems may arise if the QoS support in PXF for the interface is restarted without first reloading the pxf microcode.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%NSE-3-TUNNEL_ALREADY_IN_USE: New tunnel (local: :remote) [dec]: :[dec] already in use by tunnel [dec]: :[dec].

Explanation A new tunnel has the same local tunnel ID as an existing tunnel. The new tunnel creation will be aborted.

Recommended Action No action is required.

Error Message

```
%NSE-3-UNKNOWN_QOS_ACTION: Unknown QoS action type: [hex].
```

Explanation A QoS feature, unrecognized by PXF, has been configured with the Modular QoS CLI. The feature will work, but excessive packet punting may occur if the feature is on an output interface.

Recommended Action If performance is poor, disabling PXF might improve performance.

Error Message

%NSE-6-NOVLAN_STATS: No VLAN statistics are avaliable for PXF switched interface [chars].

Explanation No 802.1Q statistics are available for packets that are PXF switched.

```
%NSE100-3-ERRORINTR: Fatal error interrupt.
IOFPGA error interrupt statuses : Asic/FPGA [hex], Line card [hex], OIR [hex],
Envm. [hex]
```

Explanation The system has received an error interrupt from one of the sources indicated in the text of the message. The interrupt has caused the system to undergo a software-forced crash. The error interrupt could have been caused by errors insidethe line card or by the route processor system hardware or FPGA.

Recommended Action After the router comes up, enter the following commands: show c7300 pxf accounting, show c7300 pxf interfaces all, show diag, and show c7300. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show commands and your pertinent troubleshooting logs.

Error Message

```
%NSE100-3-FPGA_DLL: [chars] check failed. FPGA may not be operational
```

Explanation One of the NSE100 FPGA hardware has lost a DLL lock. This error indicates a hardware failure.

Recommended Action Power-cycle the router. If the problem persists, try upgrading the FPGA. If you are already running the latest FPGA image but can downgrade the FPGA, then downgrade the FPGA. If the problem persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%NSE100-3-GBICRDFAIL: Failed to read GBIC register after [dec] retries
```

Explanation A GBIC register could not be read after the specified number of retries.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance,

open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

 $NSE100-3-INVALID_MGMT_FE_DESC:$ One of the management fastethernet port receive descriptors is invalid, entry = [dec], software buffer address = [hex], hardware buffer address = [hex]

Explanation The value of one of the fields in the management Fast Ethernet port receive descriptors is not correct. This condition indicates a software failure in the management Fast Ethernet driver.

Recommended Action Try to reset the management Fast Ethernet interface using the shutdown and no shutdown commands. If the condition persists, gather the output of the commands show interface fastethernet 0 and show controller fastethernet 0 and contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NSE100-3-IOBUSTIMEOUT: IO access to the address [hex] timed out (Target: [chars])
```

Explanation The system controller has detected an I/O access timeout. This condition indicates either a transient or fatal error with a system component or an error involving software initialization. The source of the problem can be determined more accurately by decoding the address that was being accessed. If the I/O address is valid in the system memory map and if the system has been up and operational for a period of time, the problem is probably hardware-related. If this problem is seen repeatedly, the corresponding component might need to be replaced.

Recommended Action If this message is seen repeatedly, copy the message exactly as it appears on the console or in the system log. Enter the show running-config, show c7300 pxf accounting, show c7300 pxf interfaces all, show diag and show c7300 commands. Open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Any current system operational conditions, such as the traffic pattern, the amount of traffic, and system neighbors. Any system console messages. Also attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%NSE100-3-MACTBLFULL: Exceeded [dec] entries in Gigabit Ethernet[dec]/[dec] MAC filter table while adding [enet]
```

Explanation The Mac address table can only hold 16 entries at one time.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%NSE100-3-NOT_IDLE: Receive path not idle after reset

Explanation The hardware for the receive function is not idle after the hardware resets.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%NSE100-3-NO_GIG_SYNC: Inband Gig interface not syncronized, status [hex]

Explanation The hardware for transmitting and receiving packets to and from the router is not functioning properly

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%NSE100-3-NO_MISTRAL_INIT_STATUS: Mistral init status of 0xf not obtained, status [hex]

Explanation The Mistral initialization status could not be properly obtained.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%NSE100-3-NO_OBL_TO_INBAND: Mistral OBL to INBAND semaphore not obtained

Explanation The Mistral OBL to the inband semaphore could not be properly obtained.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

Explanation A packet length inconsistency has been detected when transmitting a a packet from the RP to PXF.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

```
%NSE100-3-PINNACLE_PORT: [chars] - [chars]
```

Explanation A failure has occurred while one of the GE ports that are present on the NSE-100 were being initialized. This condition is most likely caused by either to a software error or a transient condition before the GE port becomes successfully initialized.

Recommended Action If the GE ports either do not initialize or fail to forward traffic as a result of this condition, enter the **shutdown** command, followed by the **no shutdown** command, in interface configuration mode to shut down and restart the affected GE ports to restore the forwarding. If the message is seen repeatedly, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: –The user activity immediately preceding the receipt of this message.

Recommended Action –The prevailing system operational conditions such as the traffic patterns, amount of traffic, and system neighbors.

Recommended Action – Any additional system console messages.

Recommended Action –The output of the following commands: show version, show running-config, show controller gigabitethernet, show interface gigabitethernet, show pxf accounting, show c7300, **show logging** and **show tech-support**.

Recommended Action – Your pertinent troubleshooting logs.

Error Message

```
%NSE100-3-QSTATUS: Queue status FPGA FIFO overflow
  (Qstatus frame [hex] from the line card i/f [chars] is dropped).
```

Explanation The line card egress queue status FPGA FIFOs is full. This condition can be caused by caveats inside either the Qstatus FPGA or the line card FPGA. The software forces a system failure when this event occurrs.

Recommended Action After the router reboots, collect the output from the following commands and contact Cisco technical support representative: show c7300 pxf accounting, show c7300 pxf interfaces all, show diag, and show c7300.

Error Message

```
%NSE100-3-ROMMON_UPD_FAIL: ROM monitor upgrade in ROM [dec] failed.
```

Explanation The system is currently running the ROMmon from ROM 0 because of a failure or user termination. This failure or termination occurred during the previous boot attempt from a first-time image in the writable ROM. This error automatically sets the ROMmon image in ROM 0 as the default.

Recommended Action After downloading a new ROMmon image to the writeable ROM, you must reload the Cisco IOS software for the new ROMmon image to take effect. The first time a new ROMmon image is loaded, you must allow the system to boot the Cisco IOS software before performing any resets or a power cycle. If the ROMmon loading process is interrupted, the system interprets the interrupt as a boot failure of the new ROMmon image and reverts the ROMmon back

to the golden ROMmon image in ROM 0. Download the ROMmon image again to the writable ROM and restart the ROMmon upgrade process. If the problem persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show**

Error Message

%NSE100-3-TOOBIG: attempt to send giant packet on [chars] ([dec] bytes from [hex], max allowed [dec])

Explanation A process inside the router is attempting to send an oversized packet.

logging and **show tech-support** commands and your pertinent troubleshooting logs.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

 $NSE100-3-UNEXPECTED_TIMEREVENT:$ The NSE-100 GE port driver couldn't determine the port associated with the expired internal managed timer. The expired managed timer is pointing to [chars]

Explanation The expired managed timer returned a null context. This condition indicates a software failure in the management of the managed timer.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

%NSE100-3-VA_ERROR: Vanallen ASIC detected an error condition: [chars]

Explanation The Van Allen ASIC has detected an error condition. This message indicates either a hardware error or an error in the packet.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%NSE100-4-CITXFPGA: CI-DEMUX FPGA detected an error (Status [hex])

Explanation The cluster interconnect demux FPGA found an error with the egress packet. The type of error is indicated in the status.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Enter the following commands: show c7300 pxf accounting, show c7300 pxf interfaces all, show diag, and show c7300. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show commands and your pertinent troubleshooting logs.

Error Message

%NSE100-4-GBIC_TYPE_UNKNOWN: Unknown GBIC type or GBIC not inserted properly for interface GigabitEthernet[dec]/[dec]

Explanation The GBIC is not being recognized. Sometimes if the GBIC is not inserted all the way into its slot, the GBIC type can return as "Unknown Media Type".

Recommended Action Remove the GBIC and reinsert it all the way into the slot.

%NSE100-4-LCCONFIG: System hardware configuration [chars]compliant
with recommended quidelines.

Explanation The aggregate throughput of the line cards exceeds the capacity of the NSE-to-line-card-interface in this system.

Recommended Action Refer to the configuration guidelines for the maximum allowed aggregate throughput for the line cards in this system.

Error Message

%NSE100-4-LCTHRUPUT: The aggregate throughput of the Line Cards changed from [dec] kbps ([chars]compliant) to [dec] kbps ([chars]compliant)

Explanation The aggregate throughput of the line cards in the system has changed to make the system compliant or noncompliant with the hardware configuration guidelines.

Recommended Action Refer to the configuration guidelines for the maximum allowed aggregate throughtput for the line cards in this system.

Error Message

%NSE100-4-ROMMON_UPD_TERMINATE: ROM monitor upgrade in ROM [dec] terminated.

Explanation The ROMmon upgrade process has been terminated by the user. The user had terminated the Cisco IOS software boot process from a first-time image in the writable ROM. This termination causes the verification process of this new ROMmon to fail and sets the ROMmon image to "invalid."

Recommended Action After downloading a new ROMmon image to the writeable ROM, reload the Cisco IOS software for the new ROMmon image to take effect. The first time a new ROMmon image is loaded, you must allow the system to boot the Cisco IOS software before performing any resets or a power cycle. If the ROMmon loading process is interrupted, the system interprets the interrupt as a boot failure of the new ROMmon image. Download the ROMmon image again to the writable ROM and restart the ROMmon upgrade process. If the problem persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%NSE100-5-AUTONEG_ENABLE: Auto negotiation is enabled for interface GigabitEthernet[dec]/[dec] due to [chars]

Explanation The auto-negotiation feature has been enabled for the Gigabit Ethernet interface in the slot and port specified in the message text. The reason that the feature was enabled is specified in the message text. The auto-negotiation feature is required for the interface to work properly.

Recommended Action No action is required.

Error Message

%NSE100-6-ROMMON_UPD_DONE: ROM monitor upgrade in ROM [dec] successful.

Explanation The ROMmon upgrade has successfully completed.

Recommended Action No action is required.

NSP Messages

Error Message

```
%NSP-2-NOMEMORY: msgtxt_nomemory
```

Explanation An operation could not be accomplished because of a low-memory condition. The current system configuration, network environment, or possibly a software error might have exhausted or fragmented the system's memory.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a configuration that has more memory.

Error Message

```
%NSP-3-BADSLOT: Invalid slots[]: %x
```

Explanation Internal error: slottype pointer is invalid

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

```
%NSP-3-BOGUS_PARAMETER: Bogus parameter passed: %s %d
```

Explanation Internal error: parameter pased to routine is invalid

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%NSP-4-SONET ALARM: %s: %s %s
```

Explanation A SONET line warning condition has been detected

Recommended Action No action is required.

Error Message

```
%NSPINT-3-INTERNAL_ERROR: no handler for index %d
```

Explanation Internal error: an interrupt has been detected for which no handler has been registered.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%NSPINT-5-SPURIOUS: Spurious level %d interrupt (%d)
```

Explanation An interrupt for which no cause could be found has been detected.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%NSP_APS-4-SWITCH: Interface %s switched from %s to %s channel

Explanation The APS logic has determined that a switch over from one port to another was called for.

Recommended Action No action is required.

Error Message

%NSP_DISK-1-BAD_MKDIR: Unable to create directory [chars]

Explanation The specified directory could not be created.

Recommended Action Verify that the disk is usable.

Error Message

%NSP_DISK-1-BAD_ROOT: PCMCIA ATA disk directory hierarchy could not be created

Explanation The disk root specification is invalid. The directory hierarchy could not be created

Recommended Action Change the disk root specification.

Error Message

%NSP_DISK-1-MISSING: PCMCIA ATA disk has failed or is missing from system

Explanation The PCMCIA ATA disk that is used to store NRP2 configurations is missing from the system.

Recommended Action If the PCMCIA ATA disk is not present in the NSP chassis, reinsert the PCMCIA disk into the NSP chassis.

Error Message

%NSP_DISK-1-PROCESS: PROCESS Creation Failure

Explanation The processes that monitor the NSP disk could not be created.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

%NSP_DISK-1-WRONG_TYPE: Wrong type of PCMCIA card is inserted to the system

Explanation Insertion of a PCMCIA ATA disk was expected, but the card that was inserted is not a PCMCIA ATA disk.

Recommended Action If the PCMCIA ADA disk is not present in the NSP chassis, reinsert it into the proper PCMCIA SLOT. Otherwise, replace the PCMCIA disk with a known good disk. If this problem persists, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NSP_DISK-1-ZERO_SPACE: PCMCIA ATA disk has no or little space

Explanation The PCMCIA ATA disk is running critically low on storage space. There are too many files on the PCMCIA disk.

Recommended Action To make more space available, delete unused files.

Error Message

%NSP_DISK-4-DISK_LOW: PCMCIA ATA disk is running low on space

Explanation The PCMCIA ATA disk has less than 4 Mb or 10% of the disk space left. There are too many files on the PCMCIA disk.

Recommended Action To make more space available, delete unused files on the PCMCIA disk.

Error Message

%NSP_DISK-5-PRESENT_OK: PCMCIA ATA disk present/operational

Explanation The PCMCIA ATA disk that is used to store NRP2 configurations is present and operational.

Recommended Action No action is required.

Error Message

%NSP_DISK-5-SPACE_OK: PCMCIA ATA disk has enough space for normal

Explanation The PCMCIA ATA disk has enough free space for normal operation.

%NSP_OIR-3-ALOC_OIR_EVENT: OIR event structure allocation failure

Explanation Internal Oir element allocation failure. Usually this will indicate some memory leak

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Restart/reboot box at a convenient time. This problem will not affect normal operation but you will be unable to remove old hardware, or insert new hardware and bring it online

Error Message

 $NSP_OIR-3-BADCARD$: Unrecognized Card, Driver for Card not available in system software, ignoring card type 0x

Explanation Card inserted into system is not recognized by software -- ignoring.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NSP_OIR-3-BADINS: Insufficient system resources to complete card insertion/redundancy request, Reverting Configuration

Explanation Unable to allocate internal data structures for interface

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%NSP_OIR-3-BAD_FULL_INS: Cannot enable half height card, redundancy conflict

Explanation Redundancy/Card conflict with cards in adjacent slot.

Recommended Action No action is required.

Error Message

%NSP_OIR-3-BAD_HALF_INS: Cannot enable half height card, redundancy conflict

Explanation Redundancy/Card conflict with cards in adjacent slot.

Recommended Action No action is required.

Error Message

%NSP_OIR-3-INVCARD: Inserted card incompatible with previously removed card

Explanation Card inserted is not same type as one previously removed and thus invalid.

Recommended Action Please insert card similar to one which was previously removed or clear out alarm source.

Error Message

%NSP_OIR-3-INV_HWCFG1: Invalid card/configuration in slot(%d) Ignoring Card

Explanation Cards present in chassis in current mode are incompatible.

Recommended Action Remove card and clear out alarms. Card could also be incompatible with existing cards and cannot run redundantly.

Error Message

%NSP_OIR-3-INV_HWCFG2: Cannot enable card slot(%d) subslot redundancy is active on subcard in slot(%d)

Explanation Cards present in chassis in current mode are incompatible

Recommended Action Remove card and clear out alarms. Card could also be incompatible with existing cards and cannot run redundantly.

Error Message

 $NSP_OIR-3-LONGSTALL\colon$ Long bus stall (%u s) The newly inserted card may not seated properly. Please remove it and try again.

Explanation Card Bad or not properly seated.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%NSP_OIR-4-INV_REDCFG: Redundancy submode not present!
```

Explanation System config does not have Redundancy submode

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%NSP_OIR-4-UNEXPECTED_OFFLINE: 6400 Card %d/%d found off line - will 'virtually' remove and reinsert to bring online

Explanation Card has somehow gone off line. Possibly a power glitch?? SW will bring it back online.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%NSP_OIR-6-FULL_CINS: Card %s inserted into slot: %d
```

Explanation Full card inserted into slot.

%NSP_OIR-6-FULL_CREM: Card %s removed from slot: %d

Explanation Full card removed from slot.

Recommended Action No action is required.

Error Message

%NSP_OIR-6-FULL_ONLINE: Card %s, slot: %d, being brought online

Explanation Full card being brought online.

Recommended Action No action is required.

Error Message

%NSP_OIR-6-HALF_CINS: Card %s inserted into subslot: %d/%d

Explanation Half height card inserted into subslot.

Recommended Action No action is required.

Error Message

%NSP_OIR-6-HALF_CREM: Card %s removed from subslot: %d/%d

Explanation Half height card removed from subslot.

Recommended Action No action is required.

Error Message

%NSP_OIR-6-HALF_ONLINE: Card %s, subslot: %d/%d, being brought online

Explanation Half Height card being brought online.

Recommended Action No action is required.

Error Message

%NSP_OIR-6-UCARD_CREM: Card removed from subslot: [dec]/[dec] while processing Insertion

Explanation A card was removed during insertion processing.

NTP Messages

Error Message

%NTP-4-PEERUNREACH: Peer [IP_address] is unreachable

Explanation The NTP peer is unreachable.

Recommended Action Check the network connection to the peer and ensure that NTP is running on the peer.

Error Message

%NTP-4-UNSYNC: NTP sync is lost

Explanation NTP synchronization with its peer has been lost.

- Perform the following actions: –Check the network connection to the peer.
- –Check to ensure that NTP is running on the peer.
- – Check that the peer is synchronized to a stable time source.
- Check to see if the NTP packets from the peer have passed the validity tests specified in RFC1305.

Error Message

NTP-4-V6DISABLED: IPv6 is not running on interface [chars]. Cannot send NTP message.

Explanation Some NTP IPv6 specific commands are configures on an interface on which IPv6 is not running.

Recommended Action Enable IPv6 on the interface.

Error Message

```
%NTP-5-PEERSYNC: NTP synced to peer [IP_address]
```

Explanation NTP has synchronized the local clock to a new peer.

Recommended Action No action is required.

Error Message

```
%NTP-6-PEERREACH: Peer [IP_address] is reachable
```

Explanation The NTP peer is reachable.

%NTP-6-RESTART: NTP process starts

Explanation The NTP process has just started or restarted.

Recommended Action No action is required.

Error Message

%NTP-6-STOP: NTP process stops

Explanation NTP has been disabled.

Recommended Action Check to see if NTP has been manually disabled by the administrator.

NVRAM Messages

Error Message

%NVRAM-2-INIT_STAT_ERASE_FAILED: Stats Sector [dec] erase failed during initialization

Explanation A hardware error has ocurred. The sector has been marked bad.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show platform nvram command and your pertinent troubleshooting logs.

Error Message

%NVRAM-2-INIT_STAT_FAILED: Stats Sector initialization failed

Explanation The initialization of the Stats sectors failed. NVRAM is unusable.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show platform nvram and show platform nvram init commands and your pertinent troubleshooting logs.

%NVRAM-2-NO_GOOD_SECTORS: No good sectors in [chars] region

Explanation This is a hardware error. There are no good sectors available for writing in the region. If this condition occurs in the statistic region, then the pointers to configuration will not be saved in the NVRAM. The EEPROM will be the backup. If this condition occurs in the primary region, then the backup will be used to store the configuration. If this condition occurs in the backup region, then the primary region will be used to store the configuration.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show platform nvram and show platform nvram init commands and your pertinent troubleshooting logs.

Error Message

%NVRAM-3-EEPROM_WRITE_FAILED: [chars]

Explanation This is a hardware error, The write to EEPROM has failed.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show platform nvram command and your pertinent troubleshooting logs.

Error Message

%NVRAM-3-SECTOR_MARKED_BAD: Sector [dec] of region [dec] (1 = Primary, 2 = Backup, 3 = statistic) marked bad due to [chars]

Explanation A hardware error has occurred. The sector has been marked bad.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show platform nvram command and your pertinent troubleshooting logs.

Error Message

%NVRAM-3-WRITE_FAILED: Write to [chars] region failed

Explanation This is a hardware error, The write to the indicated region has failed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show platform nvram command and your pertinent troubleshooting logs.

Error Message

%NVRAM-4-ERASE_INT_LEVEL: Erase function called with interrupt level [dec]

Explanation An error occurred when the Erase function was called with interrupts disabled.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show platform nvram and show platform nvram init commands and your pertinent troubleshooting logs.

OBFL Messages

Error Message

%OBFL-5-DISABLED: Onboard Failure Logging disabled

Explanation Onboard Failure Logging has been disabled.

 $OBFL_ERRMSG-5-FILECREATEFAIL:$ OBFL %s App failed to open/create file %s . Errno = %d

Explanation The file O_CREATE operation failed.

Recommended Action No action is required.

Error Message

%OBFL_ERRMSG-5-FILEFSTATFAIL: OBFL %s App failed to fstat file %s . Errno = %d

Explanation The file fstat operation failed.

Recommended Action No action is required.

Error Message

%OBFL_ERRMSG-5-FILELSEEKFAIL: OBFL %s App failed to Lseek file %s . Errno = %d

Explanation The file Iseek operation failed.

Recommended Action No action is required.

Error Message

%OBFL_ERRMSG-5-FILEMINFREEFAIL: OBFL %s App failed to set coalesce min free

Explanation Failed to set coalese min free value.

Recommended Action No action is required.

Error Message

%OBFL_ERRMSG-5-FILEOPENFAIL: OBFL %s App failed to open file %s . Errno = %d

Explanation The file open operation failed.

Recommended Action No action is required.

Error Message

%OBFL_ERRMSG-5-FILEREADFAIL: OBFL %s App read failure on file %s . Errno = %d

Explanation The file read operation failed.

%OBFL_ERRMSG-5-HISTFILESMALL: OBFL %s App: history file is exceedingly small

Explanation The history file for this app has been detected to be very small.

Recommended Action No action is required.

OBJ_GROUP Messages

Error Message

%OBJGROUP-4-BADCHILD: Object-group '[chars]' has bad child '[chars]'

Explanation An object group has reference to an invalid child object group.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information

Error Message

\$OBJGROUP-4-BADCLASSMAP: Internal match structure points to invalid class-map '[chars]'

Explanation An object group has reference to an invalid child object group.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information

Error Message

0BJGROUP-4-BADMATCH: Invalid internal match structure in class-map '[chars]' type [int]

Explanation The class map lists an object group that references an invalid match.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OBJGROUP-4-BADOG: Reference to non-existent object-group '[chars]'

Explanation An internal structure references a nonexistent object group.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OBJGROUP-4-BADREFCNT: Bad reference counter classmap '[chars]' sgtid [int] filter
[int]

Explanation A reference counter value indicates database inconsistency.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OBJGROUP-3-CLASSMAP: Failed to perform classmap filter [chars] operation

Explanation An attempt to modify the classmap filter by the failed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%OBJGROUP-3-CREATEFAIL: Failed to create/initialize internal data structures

Explanation An attempt to create or initialize the internal data structures failed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OBJGROUP-4-EINVAL: Unexpected input value

Explanation The input value to a function was incorrect.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OBJGROUP-4-INVALIDCMD: Invalid subcommand [int]

Explanation The user tried to configure an invalid subcommand.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

*OBJGROUP-4-INVALIDFILTER: Invalid filter type [int] for classmap '[chars]'

Explanation The filter type for the match statement was unknown or invalid.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities

will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OBJGROUP-3-QFAIL: Failed to perform queue operation '[chars]'

Explanation An attempt to process an internal queue failed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

<code>%OBJGROUP-4-TOOMANYSGT:</code> Exceeded maximum allowed SGT's ([int]) in a class-map group-object match statement

Explanation The cumulative number of security group tags (SGTs) in a class-map match statement has exceeded the maximum limit. The number of SGTs includes those in the object groups and the child object groups in the hierarchy.

Recommended Action Limit the number of SGTs in the object group hierarchy referenced by the class-map match statement.

OC12SRP Messages

Error Message

%OC12SRP-1-BLKCMD: Schooner System IPC failure for OC12SRP card

Explanation c10k_card_send_blocking_cmd failed.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

%OC12SRP-1-UNKEVT: Schooner subsystem unknown event:([dec])

Explanation Schooner System received unknown event type.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OC12SRP-3-INTERNAL: OC12 SRP internal error, [chars] [dec] [dec]

Explanation Internal OC12 SRP error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OC12SRP-3-INTERNALCMD: OC12 SRP LC command internal error, [chars] [dec] [dec]

Explanation Internal OC12 SRP LC command error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OC12SRP-3-INTERNALEVT: OC12 SRP LC Event internal error, [chars] [dec] [dec]

Explanation Internal OC12 SRP LC event error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying

information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OC12SRP-3-MIBINITFAIL: OC12 SRP MIB initialization failed, [chars] [dec]

Explanation MIB initialization for OC12SRP Failed.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OC12SRP-4-MSGVERSION: Incompatible message version with slot [dec]

Explanation There is incompatibility between the the message version being sent by the line card and the message version used by the PRE. This type of incompatibility could happen if the PRE and OC12 SRP card card are using different IOS versions due to an PRE oir event

Recommended Action A microcode reload will solve the problem.

OC12SUNI Messages

Error Message

%OC12SUNI-1-NOMEMORY: Unit [dec], no memory for [chars]

Explanation There is no memory available for allocation from the heap. The error message contains text that can be used to help identify the nature of the problem.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%OC3SUNI-1-INITFAIL: Unit %d, initialization timeout failure, csr%d=0x%04x

Error Message

%OC3SUNI-1-NOMEMORY: msgtxt_nomemory

Explanation An operation could not be accomplished because of a low-memory condition. The current system configuration, network environment, or possibly a software error might have exhausted or fragmented the system's memory.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a configuration that has more memory.

Error Message

%OC3SUNI-3-BADUNIT: Bad unit number %d

Error Message

%OC3SUNI-3-SPURIDON: Unit %d, spurious IDON interrupt, csr%d=0x%04x

Error Message

%OC48C-1-INITFAIL: Unit %d, initialization failure for %s

Error Message

OC48C-1-NOMEMORY: Unit %d, no memory for %s

Explanation

OCE Messages

Error Message

%OCE-3-DECREASE_ZERO_REFCOUNT: Try to decrease zero refcount for [chars] oce [hex]

Explanation An attempt was made to decrease the reference count of OCE when it is already zero.

%OCE-3-MISSING_HANDLER_FOR_SW_OBJ: Missing handler for '[chars]' function

Explanation An internal API request has been ignored because it was unexpected.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying

information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support

nttp://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

<code>%OCE-3-MISSING_HANDLER_FOR_SW_OBJ_TYPE:</code> Missing handler for '[chars]' function for type [chars]

Explanation An internal API request has been ignored because it was unexpected.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OCE-3-OCEDEPDUMP: [chars]

Explanation An error condition triggered display of oce dependents.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

%OCE-3-OCE_CHANGED_BY_APPLY_FUNCTION: Target OCE[hex_addr] changed to[hex_addr]
by apply function[hex_addr]

Explanation An unexpected internal API request has been received. It has been ignored.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OCE-3-OCE_FWD_STATE_HANDLE: Limit of oce forward state handle allocation reached; maximum allowable number is [int]

Explanation Did not store the re-inject forwarding state handle, as the maximum number of handles are already in use.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OCE-3-OCE_FWD_STATE_HANDLE_INIT: Failed to initialize a stack of reusable forward state handles; at element [int], initial stack size is [int] elements

Explanation Could not allocate enough forwarding state handles for initial handle re-use.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

%OCE-3-QUEUE_UNLOCK: Failed to [chars] unlock[chars] for [chars] oce [hex]

Explanation An unlock process for an OCE could not be queued. This condition might be caused by a memory leak.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OCE-3-UNEXPECTED_DISP_TYPE: Unexpected disposition type is encounted; expecting disposition types are [chars], found [chars]

Explanation An internal disposition counter measure request has been ignored because it was unexpected.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

<code>%OCE-3-UNEXPECTED_SW_OBJ_TYPE: SW_OBJ handle/type mismatch; expecting oce type [chars], found [dec]</code>

Explanation An internal API request has been ignored because it was unexpected.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

%OCE-3-UNINITIALIZED_VECTOR: Improperly initialized [chars] vector in [chars] OCE bundle [hex], packet dropped

Explanation An OCE bundle vector was improperly initialized.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

ODM Messages

The following are order dependent merge messages.

Error Message

%ODM-3-CPU_TEST_FAIL: CPU card, [chars] [chars] Failed

Explanation This CPU has failed the online diagnostic test.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%ODM-3-DIAG_DISABLE: Online Diags disabled for all slots without specific config

Explanation The online diagnostic tests have been disabled for all slots except those with specific configurations.

Error Message

%ODM-3-DIAG_ENABLE: Online Diags enabled for all slots without specific config

Explanation The online diagnostic tests have been enabled for all slots except those with specific configurations.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%ODM-3-LC_DIAGS_DISABLED: Slot [dec], after [dec] Failures

Explanation The online diagnostic tests have been disabled because of multiple failures.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%ODM-3-LC_TEST_FAIL: Slot [dec], [chars] [chars] Failed
```

Explanation Online diagnostic testing has failed for the line card in the specified slot.

Error Message

%ODM-3-PEER_INCOMPATIBLE: Online Diags Peer Version is different

Explanation The version of the peer online diagnostics manager is different from the expected version.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%ODM-3-SC_DIAGS_DISABLED: Slot [dec], Subcard [dec], after [dec] Failures
```

Explanation The online diagnostic tests have been disabled because of multiple failures.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%ODM-3-SC_TEST_FAIL: 'Slot [dec], Subcard [dec], %s %s Failed
```

Explanation The online diagnostic test for the subcard specified in the error message has failed.

OER_BR Messages

Error Message

```
%OER_BR-1-ALERT: [chars]
```

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

```
%OER_BR-3-ERROR: [chars]
```

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

```
%OER_BR-4-WARNING: [chars]
```

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

```
%OER_BR-5-NOTICE: [chars]
```

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

```
%OER_BR-6-INFO: [chars]
```

Explanation Unavailable.

Recommended Action Unavailable.

```
%OER_MC-0-EMERG: [chars]
```

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

```
%OER_MC-1-ALERT: [chars]
```

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

```
%OER_MC-3-ERROR: [chars]
```

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

```
%OER_MC-4-WARNING: [chars]
```

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

```
%OER_MC-5-NOTICE: [chars]
```

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

```
%OER_MC-6-INFO: [chars]
```

Explanation Unavailable.

Recommended Action Unavailable.

%OER_TT_FLOW-2-OER_TT_FLOW_BR_CACHEINIT: Error initializing OER TT Flow BR cache

Explanation Initialization of the OER TT Flow BR cache could not be accomplished because of a low memory condition.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

%OER_TT_FLOW-2-OER_TT_FLOW_BR_EXPORTINIT: Error initializing OER TT Flow BR Export queue

Explanation Initialization of the OER TT Flow BR export queue could not be accomplished because of a low memory condition.

Recommended Action Reduce other system activitiy to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

```
%OER_TT_FLOW-4-OER_TT_FLOW_BR_FLOWEXPORT: Error exporting [chars]
```

Explanation Error in flows to RP.

Recommended Action This is a debug message only. No action is required.

OFFL Messages

Error Message

%OFFL-0-BADSCB: Unknown SCB type [dec]

Explanation An internal logic error has occurred. An attempt was made to free a buffer with an unknown type.

Recommended Action This error message is typically followed by a fatal error dump with code 37. Capture all the messages and issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

%OFFL-0-ILLFREE1: SCB chain does not end with a read hdr

Explanation An internal logic error has occurred. An attempt was made to free an incomplete sequence of buffers.

Recommended Action This error message is typically followed by a fatal error dump with code 37. Capture all the messages and issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OFFL-0-ILLFREE2: SCB ends with a read hdr with the MTC bit set

Explanation An internal logic error occurred. An attempt was made to free an incomplete sequence of buffers.

Recommended Action This error message is typically followed by a fatal error dump with code 37. Capture all the messages and issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OFFL-0-NOMBUF: Out of mbuf's for handling socket operations

Explanation An internal logic error has occurred. Not enough memory buffers were allocated to handle the current offload socket operation.

Recommended Action This error message is typically followed by a fatal error dump with code 37. Capture all the messages and issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OFFL-0-NOPEND: Trying to free buffer when no send is pending. Operation: [dec]

Explanation An internal logic error has occurred. A request to free a send buffer was made even though there is no send pending.

Recommended Action This error message is typically followed by a fatal error dump with code 37. Capture all the messages and issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

%OFFL-0-WRONGFREE: Trying to free mbuf out of sequence

Explanation An internal logic error has occurred. An unexpected address was specified in a request to free a buffer.

Recommended Action This error message is typically followed by a fatal error dump with code 37. Capture all the messages and issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%OFFL-3-BADSEQ: Socket request [chars] should be last in sequence
```

Explanation The host sent a socket request that should be the last in a sequence but is not. This error is caused either by an internal logic error or by an incompatibility between the offload code on the mainframe and the offload code on the CMCC. This message is followed by a hex dump of the request.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, call your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%OFFL-3-ILLALD: Illegal data alignment: [hex] + [dec] bytes = [hex]. xfer_element
= [hex]
```

Explanation An internal logic error has occurred. The data following an offload message header crossed a buffer boundary. The CMCC ignored the message. This error message is usually an indication that the CMCC has received bad data. Examples of such bad data are CLAW frames that are duplicated or arrive out of order. The offload messages contained in these corrupted CLAW frames are ignored, and this action can lead to hanging sessions or session loss.

Recommended Action Check to see if there were any special events that coincided with this error message, such as an IPL, a dropped session, channel errors, or any kind of debugging activity. Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

```
%OFFL-3-ILLALH: Illegal hdr alignment detected. Address [hex] + [dec] bytes [hex].
xfer_element = [hex]
```

Explanation An internal logic error has occurred. An offload message header crossed a buffer boundary. The CMCC ignored the message. This error message is usually an indication that the CMCC has received bad data. Examples of such bad data are CLAW frames that are duplicated or arrive out of order. The offload messages contained in these corrupted CLAW frames are ignored, and this action can lead to hanging sessions or session loss.

Recommended Action Check to see if there were any special events that coincided with this error message, such as an IPL, a dropped session, channel errors, or any kind of debugging activity. Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%OFFL-3-ILLEN: Illegal byte count in offload data. [dec] specified, [dec]
available. xfer_element = [hex]
```

Explanation The buffer length field in the offload message header does not equal the size of the data buffer. This condition typically means that the mainframe has sent bad data to the offload device. Examples of such bad data are CLAW frames that are duplicated or arrive out of order. The offload messages contained in these corrupted CLAW frames are ignored, and this action can lead to hanging sessions or session loss.

Recommended Action Check to see if there were any special events that coincided with this error message, such as an IPL, a dropped session, channel errors, or any kind of debugging activity. Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%OFFL-3-ILLNUM: Illegal number of socket requests. Rejected at [dec]
```

Explanation The CMCC has received a CLAW frame with too many offload messages. This condition typically means that the mainframe has sent bad data to the offload device. Examples of such bad data are CLAW frames that are duplicated or arrive out of order. The offload messages contained in these corrupted CLAW frames are ignored, and this action can lead to hanging sessions or session loss.

Recommended Action Check to see if there were any special events that coincided with this error message, such as an IPL, a dropped session, channel errors, or any kind of debugging activity. Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot

determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OFFL-3-ILLRST: Received restart with [dec] intf, [dec] is max. xfer_element =
[hex]

Explanation The host has sent an offload restart request with too many defined interfaces.

Recommended Action The CMCC has ignored the request. Check your host configuration for this offload device. If you cannot find the problem, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%OFFL-3-MISRST: Received restart [chars] with unknown IP [dec].[dec].[dec].[dec]

Explanation The host has sent an offload restart request with an unknown IP address for the API link. The CMCC has ignored the mismatch.

Recommended Action Look for the DEVICE statement for the correct offload device in your TCPIP profile. Check the IP address on the LINK statement for the API link and compare that address with the IP address configured on the offload configuration command of your CMCC. Correct your configuration so the two IP addresses match.

Error Message

%OFFL-3-NOMEM: Not enough memory to start offload tasks

Explanation Not enough free memory is available to start the TCP/IP offload tasks. The configuration request was ignored.

Recommended Action Install more memory for the CMCC, or configure fewer devices.

Error Message

%OFFL-3-NOMEMSOCK: Not enough memory to process socket requests, [dec] open, [dec] in holddown

Explanation Not enough free memory is available to process a socket request. The socket request failed.

Recommended Action Install more memory for the CMCC, configure fewer devices, or limit the number of sessions through this offload device.

%OFFL-3-NOMEMT: Insufficient memory ([chars]) for offload packet trace.

Explanation Not enough free memory is available for TCP/IP offload PKTTRACE. Tracing of a packet is skipped.

Recommended Action Refine (limit) the PKTTRACE option on the mainframe to reduce the number of packets being traced.

Error Message

%OFFL-3-PENDREQ: Pending request [hex] deleted due to new request [hex]

Explanation The offload application had to save a socket request for later execution while another request of the same type was pending. The first request was dropped. This situation typically means that the mainframe has sent duplicate CLAW frames. Depending on what kind of offload message was duplicated, a variety of effects may follow, from nothing to session loss or even data corruption.

Recommended Action This error message is typically followed by a hex dump. Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OFFL-3-REGERR: Register of offload PKTTRACE failed. Packet tracing skipped.

Explanation An internal error has occurred. The callback registry refused to add the offload tracing function to its list. The tracing of packets is skipped.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%OFFL-3-REQFORM: Socket request [dec] uses invalid parameters. Offset [dec]: [hex]

Explanation The host sent a socket request with an invalid parameter. The CMCC responded with an error code.

Recommended Action Check to see if there were any special events that coincided with this error message, such an IPL, a dropped session, channel errors, or any kind of debugging activity. Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

%OFFL-3-REQLEN: Socket request [dec] has wrong length [dec]

Explanation The host has sent a socket request with an incorrect length. The CMCC responded with an error code.

Recommended Action Check to see if there were any special events that coincided with this error message, such an IPL, a dropped session, channel errors, or any kind of debugging activity. Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OFFL-3-REQTYPE: Unknown [chars] socket request code [dec]

Explanation The host sent a socket request with an unknown type. An example could be an IOCTL request with a type code that is not implemented in the current release of CMCC microcode. The CMCC responded with an error code.

Recommended Action Check to see if there were any special events that coincided with this error message, such as an IPL, a dropped session, channel errors, or any kind of debugging activity. Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OFFL-4-BADDESC: Socket descriptor [dec] in request is bad: state [chars] compare [dec]

Explanation The host sent a socket request with a socket descriptor that is invalid. The CMCC has sent an error response to this socket request. This could be a host error or a CMCC internal logic error.

Recommended Action This message is followed by a hex dump of the request. Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

```
%OFFL-4-SENDERR: Bad serial number [hex] in send request - expected [hex]
```

Explanation The host sent a Send socket request that had an unexpected serial number in the header. This is most likely a bug on the host.

Recommended Action The CMCC sent an error response to the Send socket request. The host TCP/IP stack will probably print the error message, Unexpected result from Offload device... Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%OFFL-4-SOCLEFT: [dec] Sockets found after shutdown
```

Explanation When the offload application quit, it detected sockets that were still waiting for cleanup. This is an internal logic error.

Recommended Action This message should be preceded by other messages that provide further information. Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%OFFL-4-TRRESU: Pending trace packets now [dec], tracing resumed ([dec]).
```

Explanation The number of outstanding trace packets pending to go to the mainframe has reached an acceptable level. Tracing of packets is resumed now, but some packets received or sent by this offload device were not traced during the suspension. The number in parentheses is the count of how many times a suspend occurred. The number serves as a correlator to the suspend message.

Recommended Action No action is required.

Error Message

%OFFL-4-TRSUSP: Pending trace packet limit [dec] reached, tracing suspended
([dec]).

Explanation The limit of outstanding trace packets pending to go to the mainframe has been reached. Tracing of packets is suspended temporarily rather than continuing to flood the channel with trace data. Note: This means that some of the packets received or sent by this offload device will not be traced. The number in parentheses is the count of how many times suspend occurred. The number serves as a correlator to the resume message.

Recommended Action A message indicating the resumption of tracing will be seen when the congestion abates. No action is required; however, reducing the amount of tracing being done might minimize such suspensions.

%OFFL-6-ALIASNOTFOUND: Attempt to delete non-existing alias.

Explanation The specified alias does not exist on the offload device.

Recommended Action Make sure that the offload device has the alias you are trying to delete. If it does, copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OFFL-6-COMMAND: Unrecognized offload command code [dec]

Explanation The host sent an offload command with an invalid offload command code. The CMCC ignored the request.

Recommended Action Check to see if there were any special events that coincided with this error message, such as an IPL, a dropped session, channel errors, or any kind of debugging activity. Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, call your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%OFFL-6-DUPALIAS: Alias already exists on the offload device.

Explanation The offload device already has the specified alias.

Recommended Action Enter the write terminal command to verify that the alias exists. If it does not, copy the error me exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, call your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%OFFL-6-LONGREC: Attempt to transmit too large a record

Explanation The amount of data being read by the channel exceeded the size of the read channel command word. The CMCC freed the buffers associated with this read operation and continued.

Recommended Action This error message typically means that the host code and the CMCC code were out of synchrony on the read subchannel. Sometimes the condition corrects itself, but most of the time the subchannel has to be restarted, either by varying the device offline on the host or by unconfiguring and reconfiguring the affected offload device.

%OFFL-6-OFFLNOTFOUND: No offload device found.

Explanation No offload device was found for the IP address for which an alias is being configured.

Recommended Action Make sure the offload address specified in the offload alias command matches an offload configuration command. If an offload device exists for the specified IP address, copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OFFL-6-SOCREQ: Unrecognized socket request code [dec]

Explanation The host sent an offload socket request with an invalid request code. The CMCC responded with an error code. This error message can occur if a particular feature of the offload protocol is not supported by the current version of CMCC microcode. This error message can also occur if the CMCC has received bad data.

Recommended Action Check to see if there were any special events that coincided with this error message, such as an IPL, a dropped session, channel errors, or any kind of debugging activity. Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OFFL-6-TOOMANYALIASES: Attempt to configure too many aliases.

Explanation An attempt to configure too many aliases has been rejected. The offload application allows eight aliases per offload device.

Recommended Action If the number of existing aliases is less than the allowed maximum, copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OFFL-6-TRDISA: Offload PKTTRACE disabled.

Explanation The mainframe TCP/IP has disabled PKTTRACE tracing. This can occur because the GTF was terminated or because a NOTRACE command was issued.

Recommended Action No action is required.

%OFFL-6-TRENAB: Offload PKTTRACE enabled.

Explanation The mainframe TCP/IP has enabled tracing using PKTTRACE.

Recommended Action No action is required.

Error Message

%OFFL-6-UNEXP: Unexpected offload command code [dec]

Explanation The host sent an offload command with an offload command code that cannot be handled by the CMCC. The CMCC ignored the request.

Recommended Action Check to see if there were any special events that coincided with this error message, such an IPL, a dropped session, channel errors, or any kind of debugging activity. Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OFFL-6-VIRTOFFL: Offload device may not be created on a virtual port adapter

Explanation An attempt was made to configure an offload device on the virtual port adapter. Offload devices are permitted on physical port adapters only.

Recommended Action The configuration request was ignored. No action required.

Error Message

%OFFL-6-WRCHAIN: Received too long message, xfer_element [hex] chains to [hex]

Explanation The offload application received a message on the CLAW control link or the IP link that consisted of more than 16 CLAW buffers. This is not supported.

Recommended Action If this error is reproducible, copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

%OFFL-6-WRITEREAD: Host Wrote data on read subchannel.

Explanation The mainframe has written data to the read subchannel. This is most likely the result of a misconfiguration under a VM guest in which the write device is attached to the read subchannel.

Recommended Action Check the device definitions on the host. If the system is running under VM, verify that the write device is attached to the write subchannel and the read device is attached to the read subchannel.

Error Message

Explanation This message contains a hex dump of data associated with the immediately preceding error message.

Recommended Action Refer to the description of the immediately preceding CMCC error message for the recommended action.

Error Message

```
%OFFL-7-HEX4W: [hex]: [hex] [hex] [hex] [hex] [chars]
```

Explanation This message contains a hex dump of data associated with the immediately preceding error message.

Recommended Action Refer to the description of the immediately preceding CMCC error message for the recommended action.

OIR Messages

The following are OIR facility Zenith RPM--XF messages.

Error Message

%OIR-3-BADFPGAIMG: Controller in in slot [dec] does not have a valid FPGA image

Explanation The system has detected that the controller in the specified slot does not have a valid FPGA image.

Error Message

%OIR-3-BADIDPROM: IDPROM in slot [dec] not properly programmed

Explanation The IDPROM is not programmed correctly.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OIR-3-CARD_BADIDPROM: Card in slot [dec]/[dec] has an invalid card type in IDPROM

Explanation The line card IDPROM is unprogrammed or has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%OIR-3-CARD_UNSUPPORTED: Unsupported card type ([hex]) in slot [dec]/[dec].

Explanation The line card is not supported by this version of Cisco IOS software.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%OIR-3-CRASH: The module in slot [dec] has crashed

Explanation The module in the slot specified in the error message has crashed and will be rebooted by the supervisor.

Recommended Action Collect the crash information (crashinfo) file from the module that crashed. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl.

If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%OIR-3-DEACTIVATED: Slot [dec] [chars] [dec]: subcard [dec] deactivated

Explanation The subcard in the slot specified in the error message has been deactivated.

Recommended Action No action is required.

Error Message

%OIR-3-DETECT: Detected [chars] in slot [dec]

Explanation The card type has been detected for the card in the slot specified in the error message.

Recommended Action No action is required.

Error Message

%OIR-3-HARD_RESET: Module [dec] is being hard reset as a part of switchover error recovery

Explanation The module specified in error message is being hard reset as a recovery for failure to respond to switchover message.

Recommended Action No action is required.

Error Message

%OIR-3-INVALID_ALERT_COMBINATION: Invalid alert combination received with lrc version [dec], src version [dec]

Explanation An invalid LRC alert combination has been detected.

Recommended Action Unavailable.

Error Message

%OIR-3-INVALID_ALERT_FORMAT: Invalid LRC alert format received from slot [dec], format [hex]

Explanation An invalid LRC alert format has been detected.

Recommended Action Unavailable.

%OIR-3-INVALID_OPER_TYPE: Invalid operation on slot [dec], op_type [hex]

Explanation An invalid operation type has been received from the SRC or the LRC.

Recommended Action Unavailable.

Error Message

%OIR-3-LC_FAILURE: Module [dec] has Major online diagnostic failure, [chars]

Explanation This module has experienced a major online diagnostic failure.

Recommended Action Reseat the card. If the problem persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OIR-3-LINECARD_NOT_READY: Line card in slot [dec] not becoming ready after OIR

Explanation After OIR, the line did not become ready.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

 ${\rm %OIR-3-LONGSTALL:}$ Long bus stall ([int] s), the new PAM may not seated properly. Please remove it and try again.

Explanation A hot-swappable card that was inserted into the system has failed to respond. The card might not be properly seated.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%OIR-3-MGMT_BC_INIT_FAIL: Unable to initialize management back card.

Explanation An attempt to create a valid management back card driver plug-in has failed. This condition was most likely caused by a memory allocation failure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%OIR-3-OSC_SUBCARDDETECT: Slot [dec] [chars] [dec]: subcard [dec] inserted

Explanation The OSC subcard has been detected in the specified slot.

Recommended Action Unavailable.

Error Message

%OIR-3-OSC_SUBCARDREMOVE: Slot [dec] [chars] [dec]: subcard [dec] removed

Explanation The OSC subcard has been removed from the specified slot.

Recommended Action Unavailable.

Error Message

%OIR-3-PLUGIN_ATTACH_FAIL: Unable to attach driver plugin in slot [dec]/[dec].

Explanation An attempt for an attach operation for a valid line card driver has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

%OIR-3-PLUGIN_INIT_FAIL: Unable to create driver plugin in slot [dec]/[dec].

Explanation An attempt to create a valid line card driver plug-in failed. This condition was most likely caused by a memory allocation failure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%OIR-3-PSM_SUBCARDDETECT: Slot [dec] [chars] [dec]: subcard [dec] inserted

Explanation A PSM subcard has been detected in the slot specified in the message text.

Recommended Action No action is required.

Error Message

%OIR-3-PSM_SUBCARDREMOVE: Slot [dec] [chars] [dec]: subcard [dec] removed

Explanation A PSM subcard has been removed from the slot specified in the message text.

Recommended Action No action is required.

Error Message

%OIR-3-PWRCYCLE: Card in module [dec], is being power-cycled [chars]

Explanation The OIR facility has detected that the line card is unresponsive and has attempted to power-cycle the card.

Recommended Action No action is required.

Error Message

%OIR-3-REMCARD: Card removed from slot [dec], subcard [dec], interfaces disabled

Explanation This message indicates that the specified hot-swappable card was removed from the system.

Recommended Action This is an informational message only. No action is required.

Error Message

%OIR-3-REMOVE: Removed [chars] in slot [dec]

Explanation The specified card has been removed from the specified slot.

Recommended Action No action is required.

%OIR-3-RF_REGISTRTN_FAILED: OIR Client failed to register with RF

Explanation The OIR client has failed to register with the RF.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OIR-3-SEATED: Insert/removal failed for slot %d, check card seating

Explanation The OIR facility detected an incorrectly seated card, causing the insertion or removal of this card to fail.

Recommended Action Reseat the card in the indicated slot.

Error Message

%OIR-3-SOFT_RESET: Module [dec] is being soft reset as a part of switchover error recovery

Explanation The module specified in error message is being soft reset as a part of swichover error recovery.

Recommended Action No action is required.

Error Message

%OIR-3-STATE_MACHINE_BUG2: card_oir_insert_card: already have [hex], removing.

Explanation The line card entered into the slot has a different configuration from the existing slot configuration. The existing slot configuration will be removed.

Recommended Action No action is required.

Error Message

%OIR-3-STDBY_PWRCYCLE: Standby was notified, Card in module [dec] is being power-cycled [chars]

Explanation The OIR facility on the standby supervisor has been notified so that a line card on the active supervisor is unresponsive. The line card is being power cycled.

Recommended Action No action is required.

%OIR-3-STDBY_UNKNOWN: Standby was notified, Unknown card in slot %d

Explanation The OIR facility on Standby Supervisor was notified that line card was detected on Active but could not determine the type.

Recommended Action Reseat the card in the indicated slot.

Error Message

```
%OIR-3-SUBCARDDETECT: Slot [dec] [chars] [dec]: subcard [dec] inserted
```

Explanation A card has been detected in the specified slot.

Recommended Action No action is required.

Error Message

```
%OIR-3-SUBCARDREMOVE: Slot [dec] [chars] [dec]: subcard [dec] removed
```

Explanation The specified subcard has been removed from the specified slot.

Recommended Action No action is required.

Error Message

%OIR-3-SUBCARD_BAD: Slot [dec] [chars] [dec]: subcard [dec] does not meet operating specifications

Explanation The subcard does not meet operating specifications.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

 $OIR-3-SUBCARD_BAD_IDPROM:$ Slot [dec] [chars] [dec]: subcard [dec] IDPROM not programmed correctly

Explanation The IDPROM is not programmed correctly.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%OIR-3-SUBCARD_BAD_PORT: Slot [dec] [chars] [dec]: subcard [dec] did not initialize correctly

Explanation The subcard did not initialize correctly.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OIR-3-SUBCARD_DEACT: Slot [dec]: [[chars] [dec]] subcards deactivated

Explanation Subcards in the specified slot have been deactivated.

Recommended Action No action is required.

Error Message

%OIR-3-SUBCARD_DISC: Slot [dec]: [[chars] [dec]] subcards discovery

Explanation Subcards have been detected in the specified slot.

Recommended Action No action is required.

Error Message

%OIR-3-SUBCARD_SCANERR: Error in scanning subcards in slot [dec]

Explanation A error has occurred while subcards were being scanned.

Recommended Action Unavailable.

 $*OIR-3-UCODE_INTERNAL:$ The image download to card in slot %d failed due to internal error %d.

Explanation An internal error has occurred in the linecard image download code.

Recommended Action Issue the remote command switch dir system:image/ command to gather data that may help identify the nature of the error. Check with the Bug Toolkit to see if there are any known bugs. If there are none, contact your Cisco technical support representative and provide the representative with the gathered information

Error Message

%OIR-3-UNKNOWN: Unknown card in slot %d, card is being disabled

Explanation The OIR facility detected a line card but could not determine the type.

Recommended Action Reseat the card in the indicated slot.

Error Message

%OIR-3-UNSUPPORTED: Card in slot [dec] is unsupported. [chars]

Explanation The OIR facility has detected a line card that is not supported. The reason for this condition is specified in the error text.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OIR-3-XCVRDETECT: Slot [dec] Subcard [dec] port [dec]: line transceiver inserted

Explanation This message indicates the type of card that is detected in the slot.

Recommended Action Unavailable.

Error Message

%OIR-3-XCVRREMOVE: Slot [dec] Subcard [dec] port [dec]: line transceiver removed

Explanation The specified card has been removed from the specified slot.

Recommended Action No action is required.

```
%OIR-4-NOEOIR: %s %s version %u.%u not capable of EOIR
```

Explanation This message indicates that this card is capable of Online Insertion and Removal (OIR) hot-swapping but is not capable of Extended Online Insertion and Removal (EOIR). Though no damage would occur to the hardware, insertion or removal of the card will cause a CBUS complex restart, which would be disruptive to traffic on other cards in the system.

Recommended Action Try to restrict insertion or removal of this card to times when a CBUS complex restart will be least disruptive. Or upgrade the card to the latest revision which supports EOIR.

Error Message

%OIR-4-WARN: %s

Explanation The OIR facility detected some condition, user need take action accordingly

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%OIR-5-CARD_DETECTED: Card type [chars] ([hex]) in slot [dec]/[dec]
```

Explanation A card has been detected in the slot specified in the error message.

Recommended Action No action is required.

Error Message

```
%OIR-5-ISSU_RESET: Module [dec] is being [chars]-reset during ISSU
```

Explanation The module specified in error message is being hard/soft resetas part of a planned ISSU upgrade.

Recommended Action No action is required.

Error Message

%OIR-6-CONSOLE: Changing console ownership to %s processor

Explanation The OIR facility has switched the console to the specified processor.

Recommended Action No action is required.

<code>%OIR-6-DIAG_OFFLINE:</code> Card inserted in slot %d, is now ready for offline diagnostics

Explanation The OIR facility detected a newly inserted line card. The line card is configured for offline diagnostic state by the user. This state can be entered only after module is in online diagnostic state.

Recommended Action No action is required.

Error Message

%OIR-6-DIAG_ONLINE: Card inserted in slot %d, is now ready for online diagnostics

Explanation The OIR facility detected a newly inserted line card. The line card is configured for online diagnostic state by the user or, if diagnostic failure is detected during bootup.

Recommended Action No action is required.

Error Message

<code>%OIR-6-DISALLOW</code>: Supervisor attempting to come up as secondary in EHSA mode, will not be allowed.

Explanation The primary supervisor is in RF mode. Because EHSA and RF cannot coexist, the software disallows any attempts from the secondary supervisor to come up.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

\$OIR-6-DOWNGRADE: Fabric capable module \$d not at an appropriate hardware revision level, and can only run in flowthrough mode

Explanation This fabric capable module is not at an appropriate hardware revision level, and can only run in flowthrough (bus) mode.

Recommended Action Need to upgrade the linecard hardware.

%OIR-6-DOWNGRADE_EARL: Module %d %s installed is not identical to system PFC and will perform at current system operating mode.

Explanation The PFC/DFC module is at a higher hardware revision than the level of the system PFC. The PFC/DFC module will operate at the same level as that of the system PFC.

Recommended Action No action is required.

Error Message

%OIR-6-INSCARD: Card inserted in slot [dec], interfaces are now online

Explanation The OIR facility detects a newly inserted module. The interfaces associated with that module are operational, but are shut down until they are configured by the user. If any interfaces of that type were previously configured, they are restored to their previous state.

Recommended Action No action is required.

Error Message

%OIR-6-INSFAN: Fan %d inserted

Explanation The OIR facility detected a newly inserted fan-tray.

Recommended Action No action is required.

Error Message

%OIR-6-INSPS: Power supply inserted in slot [dec]

Explanation The OIR facility has detected the insertion of a power supply in the specified slot. The total power adjusts after the power supply is turned on,

Recommended Action No action is required.

Error Message

\$OIR-6-NOPWRISSU: Card inserted in slot [dec] powered down because ISSU is in progress

Explanation The OIR facility detected a newly inserted line card during ISSU upgrade process. It will be acted on upon completion of ISSU.

%OIR-6-PROVISION: Module [dec] does not meet the provisioning requirements, power denied

Explanation The provisioning configuration does not allow the type of line card that was inserted.

Recommended Action No action is required.

Error Message

%OIR-6-PWRFAILURE: Module [dec] is being disabled due to power convertor failure

Explanation The DC-DC power converter has failed on this module.

Recommended Action Replace the hardware. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%OIR-6-REMCARD: Card removed from slot [dec], interfaces disabled
```

Explanation The OIR facility has detected the removal of a module from the slot number specified in the error message. The interfaces on that module are administratively shut down and marked as removed. The routing table will be flushed of any routes through the removed interfaces.

Recommended Action No action is required.

Error Message

```
%OIR-6-REMFAN: Fan %d removed
```

Explanation The OIR facility detected the removal of a fan-tray [n].

Recommended Action No action is required.

Error Message

```
%OIR-6-REMPS: Power supply removed from slot [dec]
```

Explanation The OIR facility has detected the removal of a power supply from the slot specified in the error message. The total power is adjusted and power is denied to some line cards, if needed.

```
%OIR-6-RUNNING_CONFIG: [chars] [chars] failed [dec] ([chars])
```

Explanation During switchover, the OIR facility was unable to clean up the running-config processor.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%OIR-6-SEQ_MISMATCH: SCP seq_mismatch for card in slot %d : %s
```

Explanation The OIR facility Detected a scp seq mismatch for the card in the specified slot

Recommended Action No action is required.

Error Message

```
<code>%OIR-6-STDBY_INSCARD:</code> Standby was notified, card online in slot %d
```

Explanation The OIR facility on Standby Supervisor was notified by the Active that a processor was inserted in slot [n] and all the interfaces are useable now

Recommended Action No action is required.

Error Message

```
%OIR-6-STDBY_REMCARD: Standby was notified, card removed from slot %d
```

Explanation The OIR facility on Standby Supervior was notifed by the Active that a processor from slot[n] has been removed

%OIRLIB-4-NOTRACE: OIR-LIB trace initialization failed(%d)

Error Message

%OIR_ISSU-3-BUFFER: Cat6K OIR ISSU client failed to a buffer for message, error [dec]

Explanation Cat6K OIR ISSU client failed to get buffer for building a negotiation message. Thus, it can send the negotiation message to the standby unit. When there is a problem in the negotiation, the standby unit cannot be brought up.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OIR_ISSU-3-CAPABILITY: Cat6K OIR ISSU client [chars]

Explanation Cat6K OIR ISSU client observed an error during capability negotiation. When this error happens, there is a mismatch between the client capability between the active and standby unit.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show issu capability entries, show issu session and show issu negotiated capability commands to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OIR_ISSU-3-INIT: Cat6K OIR ISSU client initialization failed at [chars], error [chars]

Explanation Cat6K OIR ISSU client could not be initialized; this will cause catstrophic failure when ISSU upgrade or downgrade is performed.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OIR_ISSU-3-MSG_NOT_OK: Cat6K OIR ISSU client message [dec] is not compatible

Explanation Cat6K OIR ISSU client received an incompatible message from the peer unit. As the message is not compatible, it cannot be processed by this unit.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show issu message group, show issu session and show issu negotiated version commands to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OIR_ISSU-3-MSG_SIZE: Cat6K OIR ISSU client failed to get the message size for message [dec]

Explanation Cat6K OIR ISSU client failed to calculate message size for the message specified. The OIR ISSU client will not be able to send message to the standby unit.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show issu message group, show issu session and show issu negotiated version commands to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OIR_ISSU-3-POLICY: Cat6K OIR ISSU client message type [dec] is [chars]

Explanation Cat6K OIR ISSU client received an message type which it does not support. The policy is applied to make the session compatible.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show issu session command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support

representative and provide the representative with the gathered information.

Error Message

<code>%OIR_ISSU-3-SEND_FAILED:</code> Cat6K OIR ISSU client failed to send a negotiation message, error [dec]

Explanation Cat6K OIR ISSU client could not send a session negotiation message to the peer. When there is a problem in the negotiation the standby unit cannot be brought up.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show logging and show checkpoint client commands to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OIR_ISSU-3-SESSION: Cat6K OIR ISSU client [chars]

Explanation Cat6K OIR ISSU client observed an error during a session negotiation with the peer unit. When there is a problem with the session, the standby unit cannot be brought up.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show issu capability entries, show issu session and show issu negotiated capability commands to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OIR_ISSU-3-TRANSFORM: Cat6K OIR ISSU client [chars] transform failed, error [chars]

Explanation Cat6K OIR ISSU client could not transform the message. If the transmit transformation failed, it means that the checkpoint message cannot be sent to the standby unit. If the receive transformation failed, it means that the checkpoint message cannot be applied on the standby unit. In both cases, the OIR state of the bay will not be indentical with the active unit.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show issu session and show issu negotiated version commands to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will

supply clarifying information. http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%OLM-2-LMPCONSIST: Internal consistency error; [chars]
```

Explanation An internal consistency error has been encountered.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%OLM-3-ILLEVT: State [chars]; Event [chars]
```

Explanation An LMP state machine has encountered an event that is not legal or allowed in the current state.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%OLM-3-LMPNONBR: Internal error: Couldn't find neighbor while [chars]
```

Explanation An LMP processing that requires information about the neighbor has found that no such neighbor exists. This message could be due to an internal error.

Recommended Action Turn on generic and packet level debugging by entering the **debug ip lmp packets** and **debug ip lmp** (generic) commands to gather additional context type information. Gather the LMP configuration by entering the **show ip olm** command. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug

Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show and **debug** commands and your pertinent troubleshooting logs.

Error Message

%OLM-3-LMPSDMISMATCH: Service Discovery: Attribute [chars] incompatible with neighbor [chars]

Explanation Specified service attribute does not match with neighbor. The neighbor and/or the local node might not be properly configured.

Recommended Action Enter the **show mpls uni lmp neighbor** command on the local and the neighbor node (where applicable) to determine the service attributes. Modify the configuration, where feasible, to ensure that the attributes match.

Error Message

%OLM-3-LMPSDPORTFAILED: Service Discovery: Attributes for port [chars] incompatible with nbr [chars]

Explanation Port-level service attribute does not match with those of the neighbor. The neighbor and/or the local node might not be properly configured.

Recommended Action Enter the **show mpls uni lmp neighbor** command on the local and the neighbor node (where applicable) to determine the service attributes. Modify the configuration, where feasible, to ensure that the port-level service attributes match.

Error Message

%OLM-3-LMPSNDFAIL: Failed to send LMP msg to [chars]

Explanation An attempt to send an LMP control message has failed. This message could be caused by an internal error.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show and debug commands and your pertinent troubleshooting logs.

```
%OLM-4-LMPBADMSG: Bad LMP Msg; type [int]
```

Explanation An LMP message has been received with an invalid message type. This error suggests that there is a broken LMP implementation on the sending neighbor.

Recommended Action Locate the sending neighbor and turn on packet-level debugging using the **debug ip lmp packets** command. If you see an ill-formed LMP packet, gather displayed information contact your Cisco technical support representative, and provide the representative with the information you have gathered.

Error Message

```
%OLM-4-LMPBADTLV: Bad TLV; type [int]
```

Explanation An LMP message has been received with an invalid TLV type. This error suggests that there is a broken LMP implementation on the sending neighbor.

Recommended Action Locate the sending neighbor and turn on packet-level debugging using the **debug ip Imp packets** command. If you see an ill-formed LMP packet, gather displayed information, contact your Cisco technical support representative, and provide the representative with the information you have gathered.

Error Message

```
%OLM-4-LMPINVTLV: Invalid TLV Length [int] in LMP msg; remaining size [int]
```

Explanation An LMP message has been received with invalid TLV length. This error suggests that there is a broken LMP implementation on the sending neighbor.

Recommended Action Locate the sending neighbor and turn on packet-level debugging using the **debug ip lmp packets** command. If you see an ill-formed LMP packet, gather displayed information, contact your Cisco technical support representative, and provide the representative with the information you have gathered.

Error Message

```
%OLM-5-LMPMSGSEQ: LMP [chars] msg id [int] not 1+[int]
```

Explanation An LMP message has been received with a message ID that is not sequential within the control channel or TE Link. This situation is not caused by the known cases (such as local node reboot, neighbor node reboot, and neighbor retransmission) that cause message ID sequence to be broken.

Recommended Action Enter the **show ip olm stat** command. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show ip olm stat, show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OLM-5-LMPNOIPCC: Internal error: Couldn't find IPCC to send LMP msg; msg type :
[int]

Explanation This message is usually caused by race conditions when a node reboots. An LMP message is received from a neighbor before the first control channel goes locally up.

Recommended Action If the problem persists after the node has completed initialization, enter the show ip olm command to find the LMP configuration and enter the debug ip Imp packets and debug ip Imp (generic) commands to gather additional context type information. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show and debug commands and your pertinent troubleshooting logs.

Error Message

```
%OLM-5-LMPNONBR1: No such neighbor to assign
```

Explanation A user has attempted to assign an interface to an invalid neighbor.

Recommended Action Use the **show olm** command to find the correct neighbor name.

Error Message

```
OLM-5-LMPUNKSRC: LMP rcvd msg from unknown src ip <math display="inline">0x[IP\_address] , linkUnrecognized format ' \%
```

Explanation An LMP message has been received from an unknown neighbor. Most likely, the neighbor in question has not been configured on this node yet.

Recommended Action Locate the problem neighbor using the IP address and enter the **show ip olm** command. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at

http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show ip olm, show logging, and **show tech-support** commands and your pertinent troubleshooting logs.

%OLM-5-LSUMBADTEL: Invalid TE Link ID [int] in Link Summary message

Explanation A link summary, link summary acknowledgement, or link summary no acknowledgement message has been received with a bad TE link ID. Most likely, the sending node does not have LMP configured correctly.

Recommended Action Locate the neighbor sending the LMP message with invalid TE Link ID. Enter the **show ip olm** command and ensure that the port ID mappings between the two nodes are correct.

Error Message

%OLM-5-LSUMMISMATCH: Link Summary parameter([chars]) mismatch

Explanation The port ID and other link summary parameters do not match those on the neighbor. The neighbor or the local node is not properly configured.

Recommended Action Enter the **show ip olm** command on the local and neighbor nodes. Make sure that the port IDs match.

ONLINE Messages

The following are SCP download messages.

Error Message

 $ONLINE-2-LCP_BOOT_MISMATCH$: The system detected LCP boot version mismatch for module in slot %d, and will upgrade with new LCP boot image bundled into the system image, and power cycle the module.

Explanation The system detected LCP boot version mismatch for module. This will normally happen, if the LCP boot version on legacy modules is old for the modules which require rapid boot support The LCP boot version is upgraded automatically, and the module will be power cycled.

Recommended Action No action is required.

Error Message

<code>%ONLINE-6-DNLDFAIL: Module [dec], Proc. [dec], Runtime image download failed because of [chars]</code>

Explanation The system was not able to download the runtime image to the module or processor. The reason for the failure is displayed in the error message.

%ONLINE-6-INITFAIL: Module [dec]: Failed to [chars]

Explanation The system failed to bring the named module online. The reason for the failure is displayed in the error message.

Recommended Action No action is required.

Error Message

<code>%ONLINE-6-INVALID_DNLD_REQ:</code> Received an unexpected image download request from Linecard Module %d, Proc %d. Linecard image download request reason was %s

Explanation The system received an image download request from the module and processor complex specified in the message text, but that complex has already downloaded the image and should be initialized and operating normally.

Recommended Action No action is required.

Error Message

<code>%ONLINE-6-TIMER: Module [dec], Proc. [dec]. Failed to bring online because of timer event</code>

Explanation The system was not able to download the runtime image to the module or processor because the download or ASIC initialization did not complete in the allocated time.

<code>%ONLINEDIAG-2-CPU_SWITCH_LB_TST_ERROR:</code> CPU Switch Interface : %d consecutive loopback diagnostic pkts in error/lost. The packet loss can be due to congestion. Issue the command sh diag online cpusw to get more details about the failure. If this error occurs frequently, contact your technical representative for assistance with the output of the command show techsupport.

Error Message

<code>%ONLINEDIAG-2-CPU_SWITCH_LB_TST_PKT_THRESH_ERROR:</code> CPU Switch Interface : %d/%d of online diagnostic packets in error. The packet loss can be due to congestion. Issue the command sh diag online cpusw to get more details about the failure. If this error occurs frequently, contact your technical representative for assistance with the output of the command show techsupport.

Error Message

%ONLINEDIAG-2-ONLINE_SNAKE_L3_TST_ERROR: For Port %d/%d/%d : %d consecutive Snake Test packets encountered error. The error can be due to congestion. Issue the command show diag online snake o get more details about the failure. If this error occurs frequently, contact your technical representative for assistance with the output of the command show techsupport.

Error Message

 $%ONLINEDIAG-2-ONLINE_SNAKE_TST_ERROR$: For Port %d/%d/%d: %d consecutive Snake Test packets encountered error. The error can be due to congestion. Interface will change to administratively down. Issue the command show diag online snake to get more details about the failure. If this error occurs frequently, contact your technical representative for assistance with the output of the command show techsupport.

Error Message

<code>%ONLINEDIAG-3-CPU_SWITCH_LB_TST_CONN_SETUP_FAIL:</code> CPU Switch Interface : Unable to setup connections CPU Switch Loopback Test is disabled. Free up connection esources on the CPU port(atm0) and enable the test with the command diag online cpusw from the configuration prompt.

Recommended Action

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Error Message

<code>%ONLINEDIAG-5-ACCESS_TEST_FAIL:</code> Unable to read from %s in slot %d. Issue the command sh diag online access to get more detials about the failure

Error Message

<code>%ONLINEDIAG-5-EPAM_OIR_TEST_FAIL:</code> %s Loop back test failed for slot %d subcard = %d portnum = %d. The interface is brought down. Issue the command sh diag online oir to get more details about the failure

Error Message

<code>%ONLINEDIAG-5-OIR_TEST_FAIL:</code> %s Loop back test failed for slot %d subcard = %d portnum = %d. The interface is brought down. Issue the command sh diag online oir to get more details about the failure

Error Message

<code>%ONLINEDIAG-6-ACCESS_TEST_WARNING:</code> Unable to read from card in slot %d sub_card %d Issue the command sh diag online access to get more detials about the failure

Error Message

<code>%ONLINEDIAG-6-ACCESS_TEST_WARNING_UNKNOWN:</code> Found unknown card in slot %d Issue the command sh diag online access to get more detials about the failure

Explanation

Recommended Action

ONS15530 Messages

The following are Cisco ONS 15530 trunk card messages.

%ONS15530-0-LC_EMERG: %s

Error Message

%ONS15530-1-DISCOVER_ENET: Failed to init Ethernet device [dec]

Explanation The software could not be initialize.

Recommended Action Power down the system, reseat the interface card, and reboot the system. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at

http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%ONS15530-1-DISCOVER_SAR: Failed to init SAR device %d

Explanation The software could not initialize

Recommended Action Power down, reseat the interface card, and reboot. If the message recurs, call your technical support representative for assistance.

Error Message

%ONS15530-1-LC_ALERT: %s

Error Message

%ONS15530-2-BADINTERFACE: Out of range Card interface, %d on slot %d

Explanation The software specified an out-of-range card interface.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%ONS15530-2-BADRSRCNUM: Invalid resource number from PXF (%d). (PLEASE REPORT THIS!)

Explanation The PXF hardware diversion path specified a bad resource number.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%ONS15530-2-BADSLOT: Out of range card slot index%d

Explanation The software specified an out-of-range card slot index.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%ONS15530-2-BADSLOTSUBSLOT: Out of range card slot/subslot pair%d/%d

Explanation The software specified an out-of-range card slot/subslot pair.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

\$0NS15530-2-CARDRECUR: Recursive loop while getting the daughtercard info for card type \$d

Explanation While getting the daughter card info for the chassismib the platform snmp code goes into an infinite loop.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ONS15530-2-LC_CRIT: %s
```

Error Message

%ONS15530-2-NOMEMORY: No memory available for [chars]

Explanation An attempt to allocate memory has failed.

Recommended Action Perform the following actions to attempt to remedy the problem:

- Add memory.
- Disable some features.
- Apply filtering to decrease the size of system data structures (the routing table, for example).
- Reduce other system activities to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

```
%ONS15530-3-CHASSIS: Unknown chassis model.
```

Explanation The data that is stored in midplane is invalid or is incomplete.

Recommended Action Open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative to update your system.

%ONS15530-3-CONFIG: Recommended port adapter configuration exceeded

Error Message

%ONS15530-3-DEACTIVATED: card in slot [%d/%d] disabled.

Explanation The card is being deactivated.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%ONS15530-3-IDPROM_MISMATCH: Mismatch in backplane IDPROM, %s: Active-side=%d, Sby-side=%d

Explanation There are two backplane IDPROMS. Each is readable by one of the two redundant CPUs. Most IDPROM fields should be programmed by manufacturing to contain identical information. Only the first mismatched field is shown. Use a CLI show command to see additional mismatches.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%ONS15530-3-IDPROM_STR_MISMATCH: Mismatch in backplane IDPROM, %s: Active-side=%s, Sby-side=%s

Explanation There are two backplane IDPROMS. Each is readable by one of the two redundant CPUs. Most IDPROM fields should be programmed by manufacturing to contain identical information. Only the first mismatched string is shown. Use a CLI show command to see additional mismatches.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%ONS15530-3-IONOTO: IO card discover in non-zero slot [dec]/[dec]

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

%ONS15530-3-IPC: %s: IPC Failure

Error Message

%ONS15530-3-IPCOPENFAILED: Couldn't open IPC portfor port id [hex] slot [int]/[int]: [chars]

Explanation Unavailable.

Recommended Action Unavailable.

```
%ONS15530-3-LC_ERR: %s
```

Error Message

```
%ONS15530-3-LC_UNKNOWN: %s
```

Error Message

```
%ONS15530-3-NOACK: Access to %s temperature sensor failed
```

Explanation Accesses to chassis temperature sensor failed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%ONS15530-3-NOMAC: Can't allocate MAC address for interface [int]/[int]
```

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

```
%ONS15530-3-NOMEM: OUT of Memory: [chars]
```

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

```
%ONS15530-3-NOPORTINFO: Port info invalid for port [dec] slot [int]/[int]: [chars]
```

Explanation Unavailable.

Recommended Action Unavailable.

%ONS15530-3-NOPORTINFO_ID: Port info invalid for port id [hex] slot [int]/[int]: [chars]

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

%ONS15530-3-PLUGIN_UNKNOWN: Unknown card type %x in slot %d/%d.

Explanation The card in the specified slot is not a known type.

Error Message

%ONS15530-3-UNEXP_INTR: Interrupt %s not expected, masking off

Explanation An interrupt of a certain type was signalled, but the interrupt handler for this type of interrupt is not yet installed.

Recommended Action This problem should be self-correcting but indicates either a hardware or a software defect. If it's a hardware defect, further problems are to be expected. If it's a software problem, certain types of error and alarm conditions may be left undetected. Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

%ONS15530-3-XPLTA2D: Err calculating xpolated value: %s

Explanation physubcard or idprom ptr is NULL

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%ONS15530-3-XPLTDBM: Err calculating xpolated value: %s

Explanation physubcard or idprom ptr is NULL

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance,

open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%ONS15530-4-COOKIE: Corrupt or missing MAC address cookie using random base [enet]

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

%ONS15530-4-LC_WARN: %s

Error Message

%ONS15530-4-MACBLKSIZE: Unknown MAC address block size.

Explanation The data stored in the midplane is invalid or is incomplete.

Recommended Action Open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative to update your system.

Error Message

%ONS15530-4-NOCPUVER: Invalid CPU ID, assuming revision 1

Explanation The CPU ID could not be read from EEPROM. This is probably due to a hardware failure.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%ONS15530-4-PCIVALID: PCI activation failed, slot %d, 0x%x

Error Message

```
%ONS15530-5-DEV: Compact flash card (disk0) %s
```

Explanation A file system's status has changed. Follow any instructions provided with the message.

Recommended Action No action is required.

Error Message

```
%ONS15530-5-LC_NOTICE: %s
```

Error Message

```
%ONS15530-6-LC_INFO: %s
```

Error Message

```
%ONS15530-7-LC_DEBUG: %s
```

Explanation

ON_DIAG Messages

Error Message

```
%ON_DIAG-3-ADMIN_DOWN: Test [chars] Failed, [chars] backcard is not present
```

Explanation The correct back card is not present.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-ALARM_UPDATE: [chars], Testname ([chars]), Type ([chars])
```

Explanation The alarm for the test is being updated.

```
%ON_DIAG-3-BARIUM: Barium Device not accessible
```

Explanation An attempt to access the barium device failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-BARIUM_REG: [chars], expected [hex], actual [hex]
```

Explanation A barium register read operation has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-CACHE_CRITICAL_DOWN: [chars]: [chars]
```

Explanation A critical failure of cache hardware diagnostics has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-CACHE_SHUT_DOWN: [chars]: [chars]
```

Explanation A failure involving the shutdown of cache hardware diagnostics has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-CAM_REG: [chars], expected [hex], actual [hex]
```

Explanation An attempt to read the CAM Register has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

```
%ON_DIAG-3-CBC_REG: [chars], expected [hex], actual [hex]
```

Explanation An attempt to read the CBC ASIC Register has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-CLI_ERR: CLI failure [chars]
```

Explanation Error message indicating a failure occurred which may result in missing CLI commands or configuration options.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-DG_INT_ERR: [chars]
```

Explanation An internal error occurred with the Online Diagnostics subsystem.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-DG_PROC_ERR: Failed to spawn [chars] process
```

Explanation An internal error occurred while trying to spawn a diagnostic process.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance,

open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-EEPROM_SHUT_DOWN: [chars]
```

Explanation EEPROM hardware diagnostics have failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-EXCESS_RUN_TIME: Disabling the test ([chars])- run time, [dec] milliseconds, greater than the max. permissible run time [dec] milliseconds
```

Explanation The test is being disabled because it took excess run time.

Recommended Action No action is required.

Error Message

```
%ON_DIAG-3-FIB_REG: [chars], expected [hex], [hex], [hex] and actual [hex], [hex],
[hex]
```

Explanation An FIB register read operation has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-FLASH_CRITICAL_DOWN: [chars]: [chars]
```

Explanation A critical failure involving Flash memory hardware diagnostics has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-FLASH_SHUT_DOWN: [chars]: [chars]
```

Explanation A failure involving a shutdown of the Flash memory hardware diagnostics has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

```
%ON_DIAG-3-GIGMAC_REG: [chars], expected [hex], actual [hex]
```

Explanation A GIGMAC register read operation has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-IOFPGA_SHUT_DOWN: [chars]: [chars]
```

Explanation IO FPGA hardware diagnostics have failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-MEMORY_CRITICAL_DOWN: [chars]: [chars]
```

Explanation A critical failure involving memory hardware diagnostics has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-MEMORY_SHUT_DOWN: [chars]: [chars]
```

Explanation A shutdown failure involving memory hardware diagnostics has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-MEMPOOL_BADCPU_TYPE: Bad cpucard type [dec] for [chars]
```

Explanation An administrative failure involving the memory pool software diagnostics has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

```
%ON_DIAG-3-MEMPOOL_SHUT_DOWN: [chars]: [chars]
```

Explanation An administrative failure involving the memory pool software diagnostics has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-NO_TST_CNF: Test suite configuration file not found
```

Explanation Failed to locate the diagnostics configuration file.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-NULL_CTC: Null CTC message received
```

Explanation An empty CTC message was received.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-NULL_DG_MSG: Null diagnostic message received
```

Explanation An empty diagnostic message was received.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

```
%ON_DIAG-3-NVRAM_CRITICAL_DOWN: [chars]: [chars]
```

Explanation A critical failure involving NVRAM hardware diagnostics has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-NVRAM_SHUT_DOWN: [chars]: [chars]
```

Explanation A shutdown failure involving NVRAM hardware diagnostics has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-PCI_BRIDGE_SHUT_DOWN: DIAG Error: DEC21150/2115X or TI_21150 Vendor ID error [hex]
```

Explanation A shutdown failure involving the PCI bridge HW diagnostics has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-PCI_ID_SHUT_DOWN: [chars] [hex]
```

Explanation A shutdown failure involving the PCI ID hardware diagnostics has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-PKTTYPE_SHUT_DOWN: [chars]: [chars]
```

Explanation A shutdown failure involving packet type software diagnostics has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

```
%ON_DIAG-3-POSIO_REG: [chars], expected [hex], actual [hex]
```

Explanation A POSIO register read operation has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-SAR_SHUT_DOWN: [chars]: [chars]
```

Explanation A SAR hardware diagnostics operation has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-SKY_REG: [chars], expected [hex], actual [hex]
```

Explanation A SKY register read operation has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-SPROCESS_SHUT_DOWN: [chars]: [chars]
```

Explanation A shutdown failure involving an S process software diagnostics operation has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ON_DIAG-3-TIB_REG: [chars], expected [hex], [hex], [hex] and actual [hex], [hex],
[hex]
```

Explanation A TIB register read operation has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

%ON_DIAG-3-UNKNOWN_CTC: Unknown CTC message type [dec] received

Explanation Unknown CTC message type was received.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%ON_DIAG-3-UNKNOWN_DG_EVTCLASS: Unknown diagnostic event class [dec]

Explanation Detected an unknown diagnostic event class.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%ON_DIAG-3-UNKNOWN_DG_MSG: Unknown diagnostic message type [dec] received

Explanation An unknown diagnostic message type was received.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OOBP-4-ASYNC_NO_RSP: Warning -- reset async oobp no response

Explanation Async driver does not response to the ASYNC RESET command.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying

information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%00BP-4-00BP_CANT_BE_USED: Warning -- oobp can't be used
```

Explanation Async driver can't send out the oobp message because no resource.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%OOBP-4-TIMEOUT_AT_WRONG_STATE: Warning -- OOBP driver timeout at wrong state
```

Explanation Oobp response time-out at wrong oobp state.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%OOM--HIT_MEMORY_THRESH: System memory usage has reached %d percent
```

Explanation The system memory usage has reached configured threshold. Itmight be running out of memory and operations may begin tofail.

Recommended Action UNAVAILABLE

%OOM--NO_MEMORY_AVAIL: The system is very low on available memory.Operations will begin to fail.

Explanation The system has exhausted all available memory. It is not possible to continue stable operation.

Recommended Action UNAVAILABLE

Error Message

 $\mbox{\ensuremath{\verb||}{OOM--NO_MEMORY_RESET:}}$ The system is completely out of available memory.The board will be reset.

Explanation The system has exhausted all available memory. It is not possible to continue operation.

Recommended Action UNAVAILABLE

Error Message

```
%OPENSSL-3-SSLERR: [chars] [chars]
[chars]
```

Explanation The secure server has reported that an Open SSL error has occurred.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%OPTICAL_IF-1-ALARM: [chars], [chars]: [chars]
```

Explanation The specified alarm has been detected or has been cleared.

Recommended Action Repair the source of the alarm.

```
%OPTICAL_IF-3-INTERNAL_ERROR: [chars]
```

Explanation The metopt subsystem has encountered an internal software error. The message contains text that can help identify the nature of the problem.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OPTICAL_IF_ALARMS-3-HIGH_ALM_THR: High Alarm Threshold for [chars] on port [chars] [chars]

Explanation The specified port has exceeded the high alarm level.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OPTICAL_IF_ALARMS-3-HIGH_WARN_THR: High Warning Threshold for [chars] on port [chars] [chars]

Explanation The specified port has exceeded the high warning level.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%OPTICAL_IF_ALARMS-3-LOW_ALM_THR: Low Alarm Threshold for [chars] on port [chars] [chars]

Explanation The specified port has exceeded the low alarm level.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OPTICAL_IF_ALARMS-3-LOW_WARN_THR: Low Warning Threshold for [chars] on port [chars] [chars]

Explanation The specified port has exceeded the low warning level.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OPTICAL_MONITOR-4-FAILED: [chars] [chars]

Explanation The current hardware version cannot support monitoring for the rate that was specified.

Recommended Action Specify a different rate for monitoring, if possible. If you require further assistance, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at

http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

```
%OSCP-3-INTERNAL_ERROR: [chars] [hex]
```

Explanation An internal software error has occurred. The message contains text that can help identify the nature of the problem.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

OSCP Messages

Error Message

```
%OSCP-4-BADPACKET: Invalid pkt: [chars] [dec] [dec]
```

Explanation An invalid packet has been received from a network peer.

Recommended Action Check the originating device for the cause of the corrupted packets.

Error Message

```
%OSCP-4-CONFIG_ERROR: Configuration Error: [chars]
```

Explanation A configuration error has occurred in the OSCP subsystem. The error message text gives details about the cause.

Recommended Action Change the configuration to correct the error.

Error Message

```
%OSCP-7-DEBUG: [chars]
```

Explanation This is an informational message only. It is used by Cisco for testing.

Recommended Action Informational messages can be disabled by changing the logging level. Otherwise, no action is required.

%OSM_MULTILINK-3-PROCESS_FAIL: Process creation failed for %s

Explanation A Process has failed to be created. The probable cause of this condition is that the system is low on memory.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

%OSM_MULTILINK-4-BUNDLEERROR: Bundle(%s) is not distributed

Explanation The Bundle specified in the error message is not associated with the OSM.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSM_MULTILINK-4-BUNDLENULL: Unexpected bundle missing in %s searching for %s

Explanation A software error has occured.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSM_MULTILINK-4-BUNDLEVC: %s for vc %d and if_index %d

Explanation A software error has occured while a bundle was being provisioned.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSM_MULTILINK-4-IDBNULL: Unexpected hwidb missing in %s

Explanation A software error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

 $\mbox{MOSM_MULTILINK-4-IPCNOTREADY:}$ Bundle process on the line card is not ready to handle message of type $\mbox{\ensuremath{\$d}}$

Explanation Bundle is being deleted on the line card due to ip cef disable command and is not ready to process other messages. The most likely cause of this condition is that CEF was disabled and enabled in a very quick succession.

Recommended Action Reset the line card.

Error Message

%OSM_MULTILINK-4-MLPLINK_NULL: Unexpected mlp link missing in [chars]

Explanation A software error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

%OSM_MULTILINK-4-MLPSBNULL: Unexpected subblock missing for %s

Explanation A software error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSM_MULTILINK-4-NUMLINKS: The bundle had an unexpected number of links(%d) in %s

Explanation A softwate error has occured.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

 $SOSM_MULTILINK-4-QUEUE_BUNDLE:$ Not able to queue the bundle (%s), Num. of bundles %d

Explanation A software error has occured while a bundle was being inserted in queue.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

 $\$OSM_MULTILINK-5-BUNDLEEXCEEDED$: Bundle(\$s) cannot be associated with link(\$s), max \$d

Explanation The number of bundles has been exceeded for the group belonging to the link. The bundle specified in the error message will not work in distributed mode. If the line card is CT3 (OSM-CT3 line card), then ports 1-12 belong to one group. If the line card is a CHOC-3 line card (OSM-CHOC-DS0 line card), ports 1-4 belong to one group. If the line card is a CHOC-12 line card (OSM-CHOC-DS0 line card), the port 1 belongs to one group and port 2 belongs to the second group. Only 168 bundles can be supported per group. The new bundle created will cause an extra load on the RP CPU.

Recommended Action Remove the multilink interface that is causing this condition.

Error Message

%OSM_MULTILINK-5-CFGERROR: Cannot set up this bundle link-- %s to bundle %s reason:%s

Explanation The bundle link could not be set up. A configuration of resource limit has been reached. The bundle may be forced to become inactive (go down). If the line card is a CT3 line card (OSM-CT3 line card), then ports 1-12 belong to one group. If the line card is a CHOC-3 line card (OSM-CHOC-DS0 line card), then ports 1-4 belong to one group. If the line card is a CHOC-12 line card (OSM-CHOC-DS0 line card), then port 1 belongs to one group and port 2 belongs to the second group. Only 168 bundles can be supported per group and each bundle can have a maxmum of 12 links.

Recommended Action Ensure that all links belong to the same group and slot. Check the number of links in the bundle and number of bundles in the group. After the configuration has been corrected, enter the shutdown and no shutdown comands on the multilink interface to shut down and restart the interface.

OSPF Messages

The following are the Open Shortest Path First messages.

Error Message

%OSPF-3-CFG_NBR_ALLOC_FAILED: Could not allocate or find neighbor %i

Explanation An internal error occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%OSPF-3-CFG_NBR_FAILED: Neighbor %i not configured

Explanation The configured neighbor options are not valid

Recommended Action Check the configuration options for the neighbor command and correct the options or the network type for the neighbor's interface.

Error Message

```
%OSPF-3-DBEXIST: area %s lsid %i mask %i adv %i type %d
```

Explanation OSPF has a problem locating the LSA, which could lead to a memory leak.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%OSPF-3-INTERNALERR: Internal error: %s
```

Explanation An internal software error occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%OSPF-3-INT_ATTACHED_MULTI_AREAS: Interface %s is attached to more than one area
```

Explanation The interface is on the interface list for an area other than the one to which the interface links.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPF-3-INT_ATTACHED_MULTI_AREAS: Interface %s is attached to more than one area

Explanation The interface is on the interface list for an area other than the one which the interface links to.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPF-3-INT_INIT_FAILED: Init failed for interface %s, %s.

Explanation The interface initialization failed. Possible reasons: 1) The area to which the interface is being attached is being deleted. 2) It was not possible to create a neighbor datablock for the local router.

Recommended Action Remove the configuration command that covers the interface and then try it again. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OSPF-3-INVALID_ENCR_PASSWORD: Invalid encrypted password [chars].

Explanation The user-specified encrypted password is invalid. If the specified encrypted password is not valid, an error message will be printed during the configuration.

Recommended Action Either specify a clear text password and enter the **service password-encryption** command for encryption, or make sure that the specified encrypted password is valid. Specify the clear text password or a valid encrypted password.

%OSPF-3-LSA_LEN: Area %s router-LSA of length %d bytes plus update overhead %d bytes is too large to flood.

Explanation The router tried to build a router-LSA which is larger than the huge system buffer size or the OSPF protocol imposed maximum.

Recommended Action If the reported total length (LSA size plus overhead) is larger than the huge system buffer size but less than 65535 bytes (the OSPF protocol imposed maximum) you may increase the huge system buffer size. If the reported total length is greater than 65535 you will need to decrease the number of OSPF interfaces in the reported area.

Error Message

%OSPF-3-NOBACKBONE: Flagged as being an ABR without a backbone area

Explanation The router was flagged as an Area Border Router (ABR) without backbone area in the router.

Recommended Action Restart the OSPF process.

Error Message

%OSPF-3-NOCONNDB: No database entry for connected address %i

Explanation While calculating OSPF routes, the router could not find the LSA that represents the connected route in the router.

Recommended Action To clear the IP routes in the routing table, use the **clear ip route** command.

Error Message

%OSPF-3-NOCONNDB: No database entry for connected address %i

Explanation While calculating OSPF routes, the router could not find the link-state advertisement that represents the connected route in the router.

Recommended Action Clear the IP routes in the routing table by entering the command clear ip route.

Error Message

%OSPF-3-NOLSA: Failed to find this routers LSA in %s**Explanation** The router is not able to find its own router LSA.

Recommended Action This will self-correct. However, if this message recurs, restart the OSPF process.

%OSPF-3-NOLSA: Failed to find this routers LSA in %s

Explanation The router is not able to find its own router link-state advertisement. This can occur occasionally and self-correct. However, if this message recurs, restart the OSPF process.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OSPF-3-NOSELF: if %s if_state %d

Explanation An internal error occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPF-3-NO_SNMP_IFINDEX: Interface [chars] does not have an SNMP MIB ifIndex and has been disabled

Explanation The OSPF process has been configured to use the SNMP MIB ifIndex value for the interface IDs. However, the ifIndex is not set on this interface, so the interface cannot be enabled.

Recommended Action Unconfigure interface-id snmp-if-index for this OSPF process.

Error Message

 $\protect\$ %oSPF-3-RDB_NO_LSA: lsid %i adv %i type %d gateway %i metric %d network %i mask %i protocol %#x attr %#x net-metric %d

Explanation OSPF found inconsistency between its database and IP routing table.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

<code>%OSPF-3-RECONF_VL:</code> OSPF process %d is changing router-id. Reconfigure virtual link neighbors with our new router-id

Explanation OSPF process is being reset, and it is going to select a new router-id. This will bring down all virtual links. To make them work again, virtual link configuration needs to be changed on all virtual link neighbors.

Recommended Action Change virtual link configuration on all the virtual link neighbors, to reflect our new router-id.

Error Message

%OSPF-3-UNKNOWNSTATE: Reached unknown state in neighbor state machine

Explanation An internal software error in this router has resulted in an invalid neighbor state during database exchange.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPF-3-UNKNOWNSTATE: Reached unknown state in neighbor state machine

Explanation An internal software error in this router has resulted in an invalid neighbor state during database exchange.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%OSPF-4-AREA_ALLOC_FAIL: Can not allocate memory for area structure

Explanation An internal error occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPF-4-ASBR_WITHOUT_VALID_AREA: Router is currently an ASBR while having only one area which is a stub area

Explanation An ASBR must be attached to an area which can carry AS External or NSSA LSAs

Recommended Action Make the area to which the router is attached into an NSSA or regular area.

Error Message

%OSPF-4-BADLENGTH: Invalid length %d in OSPF packet type %d from %i (ID %i), %s

Explanation The system received an OSPF packet with a length field of less than the normal header size or inconsistent with the size of the IP packet in which it arrived. This indicates an error in the sender of the packet.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

```
%OSPF-4-BADLENGTH: Invalid length [dec] in OSPF packet type [dec] from [IP_address] (ID [IP_address]), [chars]
```

Explanation The system has received an OSPF packet with a field length of less than normal header size or a field length that is inconsistent with the size of the IP packet in which the OSPF packet arrived. This problem indicates an error involving the sender of the packet.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%OSPF-4-BADLSAMASK: Bad LSA mask: Type [dec], LSID [IP_address] Mask [IP_address] from [IP_address] NOTE: This route will not be installed in the routing table.
```

Explanation The router has received an LSA with an invalid LSA mask. The cause is likely a wrong configuration from the LSA originator.

Recommended Action Find the originating router of the LSA with the invalid mask and correct any misconfiguration on that network. For further debugging help, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%OSPF-4-BADLSATYPE: Invalid lsa: %s Type %d, Length %d, LSID %i from %i, %i, %s

Explanation The router received an LSA with invalid data. The LSA contains an invalid LSA type, wrong checksum, or wrong length. The cause is either memory corruption or unexpected behavior on a router.

Recommended Action From a neighboring address, locate the problem router. Perform the following steps: 1.Collect a running configuration of the router by entering the **show running-config** command.

Recommended Action 2.Enter the **show ip ospf database** command to gather data that may help identify the nature of the error.

Recommended Action 3.Enter the **show ip ospf database** link-state-id, with link-state-id being the IP address of the invalid LSA.

Recommended Action 4.Enter the **show logging** command to gather data that may help identify the nature of the error.

Recommended Action 5. Reboot the router.

Recommended Action 6.If you cannot determine the nature of the error from the collected information, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet athttp://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%OSPF-4-BADLSATYPE: Invalid lsa: [chars] Type [dec], LSID [IP_address] from [IP_address], [IP_address], [chars]

Explanation The router received an LSA with invalid LSA type. The cause is either memory corruption or unexpected behavior on a router.

Recommended Action From a neighboring address, locate the problem router. Perform the following diagnostic steps.

Recommended Action Step 1Collect a running configuration of the router by entering the **show running-config** command.

Recommended Action Step 2Enter the **show ip ospf database** command to gather data that may help identify the nature of the error.

Recommended Action Step 3Enter the **show ip ospf database** link-state-id, with link-state-id being the IP address of the invalid LSA.

Recommended Action Step 4Enter the **show logging** command to gather data that may help identify the nature of the error.

Recommended Action Step 5Reboot the router. If you cannot determine the nature of the error from the collected information, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

 $\$OSPF-4-CFG_NBR_INVAL_NBMA_OPT$: Can not use configured neighbor: cost and database-filter options are allowed only for a point-to-multipoint network

Explanation The configured neighbor was found on an NBMA network, and either the cost or the database-filter option was configured. These options are allowed only on point-to-multipoint type networks.

Recommended Action Check the configuration options for the neighbor command and correct the options or the network type for the neighbor's interface.

%OSPF-4-CFG_NBR_INVAL_NBMA_OPT: Can not use configured neighbor: cost and database-filter options are allowed only for a point-to-multipoint network

Explanation The configured neighbor was found on an NBMA network and either the cost or database-filter option was configured. These options are only allowed on point-to-multipoint type networks.

Recommended Action Check the configuration options for the neighbor command and correct the options or the network type for the neighbor's interface.

Error Message

%OSPF-4-CFG_NBR_INVAL_NET_TYPE: Can not use configured neighbor: neighbor command
is allowed only on NBMA and point-to-multipoint networks Explanation The configured
 neighbor was found on a network for which the network type was neither NBMA nor
 point-to-multipoint.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered.

Error Message

%OSPF-4-CFG_NBR_INVAL_NET_TYPE: Can not use configured neighbor: neighbor command is allowed only on NBMA and point-to-multipoint networks

Explanation The configured neighbor was found on a network for which the network type was neither NBMA or point-to-multipoint

Recommended Action No action is required.

Error Message

<code>%OSPF-4-CFG_NBR_INVAL_P2MP_OPT:</code> Can not use configured neighbor: poll and priority options are allowed only for a NBMA network <code>Explanation</code> The configured neighbor was found on a point-to-multipoint network and either the poll or priority option was configured. These options are allowed only on NBMA type networks.

Recommended Action Check the configuration options for the **neighbor** command and correct the options or the network type for the neighbor's interface.

%OSPF-4-CFG_NBR_INVAL_P2MP_OPT: Can not use configured neighbor: poll and priority options are allowed only for a NBMA network

Explanation The configured neighbor was found on a point-to-multipoint network and either the poll or priority option was configured. These options are only allowed on NBMA type networks.

Recommended Action Check the configuration options for the neighbor command and correct the options or the network type for the neighbor's interface.

Error Message

<code>%OSPF-4-CFG_NBR_P2MP_NEEDS_COST:</code> Can not use configured neighbor: cost or database-filter option is required for point-to-multipoint broadcast network

Explanation The configured neighbor was found on a point-to-multipoint broadcast network. Either the cost or the database-filter option must be configured.

Recommended Action Check the configuration options for the **neighbor** command and correct the options or the network type for the neighbor's interface.

Error Message

<code>%OSPF-4-CFG_NBR_P2MP_NEEDS_COST:</code> Can not use configured neighbor: cost or database-filter option is required for point-to-multipoint broadcast network

Explanation The configured neighbor was found on a point-to-multipoint broadcast network. Either the cost or database-filter option needs to be configured.

Recommended Action Check the configuration options for the neighbor command and correct the options or the network type for the neighbor's interface.

Error Message

<code>%OSPF-4-CONFLICTING_LSAID:</code> Process <code>%d</code> area <code>%s:</code> LSA origination prevented by LSA with same LSID but a different mask Existing Type <code>%d</code> LSA: LSID <code>%i%m</code> New Destination: <code>%i%mExplanation</code> An LSA origination was prevented by a conflict with an existing LSA with the same LSID but a different mask. The algorithm in RFC 2328, Appendix E is used to resolve conflicts when multiple LSAs with the same prefix and different masks are advertised. When using this algorithm is used and host routes are advertised, situations can occur where conflict resolution is impossible and either the host route or the conflicting prefix is not advertised.

Recommended Action Locate the prefix that is not advertised and the conflicting prefix using the show ip route and show ip ospf database commands. Decide which route or prefix is more important to advertise and take steps to prevent advertising the conflicting route or prefix. If you cannot determine the nature of the error from the collected information, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered.

%OSPF-4-CONFLICTING_LSAID: Process %d area %s: LSA origination prevented by LSA with same LSID but a different mask Existing Type %d LSA : LSID %i%m New Destination: %i%m

Explanation An LSA origination was prevented by a conflicit with an existing LSA with the same LSID but a different mask. The algorithm in RFC 2328, Appendix E is used to resolve conflicts when multiple LSAs with the same prefix and differing masks are advertised. When using this algorithm and host routes are advertised there are situations where conflict resolution is impossible and either the host route or the conflicting prefix is not advertised.

Recommended Action Locate the prefix that is not advertised and the conflicting prefix using show ip route and show ip ospf database. Decide which route or prefix is more important to advertise and take steps to prevent advertising the conflicting route or prefix. If you cannot determine the nature of the error from the collected information, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OSPF-4-DBD_ALLOC_FAIL: Could not allocate DBD packet

Explanation An internal error occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OSPF-4-DUP_RTRID_AREA: Detected router with duplicate router ID %i in area %s

Explanation OSPF has detected a router in the area that has the same router ID as this routing process. Duplicate router IDs may result in network instability, causing some destinations to be unreachable.

Recommended Action The OSPF router ID should be unique. Make sure all routers in the area have a unique router ID.

%OSPF-4-DUP_RTRID_AREA: Detected router with duplicate router ID [IP_address] in area [chars]

Explanation OSPF has detected a router in the area that has the same router ID as this routing process. Duplicate router IDs may result in network instability, causing some destinations to be unreachable.

Recommended Action The OSPF router ID should be unique. Ensure that all routers in the area have a unique router ID.

Error Message

%OSPF-4-DUP_RTRID_AS: Detected router with duplicate router ID [IP_address] in Type-4 LSA advertised by [IP_address]

Explanation The OSPF has received a hello packet from a neighbor that has the same router ID as this routing process. A full adjacency cannot be established.

Recommended Action The OSPF router ID must be unique. Change the router ID of the neighbor.

Error Message

%OSPF-4-DUP_RTRID_NBR: OSPF detected duplicate router-id %i from %i on interface
%s Explanation OSPF has received a hello packet from a neighbor that has the same router ID as this
routing process. A full adjacency cannot be established.

Recommended Action The OSPF router ID should be unique. Change the router ID of the neighbor.

Error Message

%OSPF-4-DUP_RTRID_NBR: OSPF detected duplicate router-id [IP_address] from [IP_address] on interface [chars]

Explanation OSPF has received a Hello packet from a neighbor that has the same router ID as this routing process. A full adjacency cannot be established.

Recommended Action The OSPF router ID should be unique. Change the router ID of the neighbor.

Error Message

*OSPF-4-ERRRCV: Received invalid packet: *s from *i, *sExplanation An invalid OSPF packet was received. Details are included in the error message. The cause might be a misconfigured OSPF or an internal error in the sender.

Recommended Action Check the OSPF configuration of the receiver and the sender for inconsistency.

```
%OSPF-4-ERRRCV: Received invalid packet: %s from %i, %s
```

Explanation An invalid OSPF packet was received. Details are included in the error message. The cause might be a misconfigured OSPF or an internal error in the sender.

Recommended Action Check the OSPF configuration of the receiver and the sender for inconsistency.

Error Message

```
%OSPF-4-FLOOD_WAR: Process %d %s LSA ID %i type-%d adv-rtr %i in area %s
```

Explanation Router is extensively reoriginating or flushing the LSA reported by this error message.

Recommended Action If this router is flushing the network LSA, the router has received a network LSA whose LSA ID conflicts with the IP address of one of the router's interfaces, and so the router flushed the LSA out of the network. For OSPF to function correctly, the IP addresses of transit networks must be unique. The conflicting routers are the router reporting this error message and the router with the OSPF router ID reported as adv-rtr in this message. If this router is reoriginating an LSA, it is probable that some other router is flushing this LSA out of the network. Find that router and resolve the conflict. Conflict for type-2 LSA may be due to duplicate LSA ID; for type-5 LSA it may be duplicate router IDs on the routers reporting this error message and on the routers connected to the other area. In an unstable network, this message may also warn of extensive reorigination of LSA for some other reason. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%OSPF-4-FLOOD_WAR: Process %d %s LSA ID %i type-%d adv-rtr %i in area %s
```

Explanation Router is extensively re-originating or flushing the LSA reported by this error message

Recommended Action If this router is flushing the network LSA, it means the router received a network LSA whose LSA ID conflicts with the IP address of one of the router's interfaces and flushed the LSA out of the network. For OSPF to function correctly the IP addresses of transit networks must be unique. Conflicting routers are the router reporting this error message and the router with the OSPF router ID reported as adv-rtr in this message. If this router is re-originating an LSA, highly probably some other router is flushing this LSA out of the network. Find that router and avoid the conflict. Conflict for type-2 LSA may be due to duplicate LSA ID, for type-5 LSA it may be duplicate router-id on the router reporting this error message and on the routers connected to the different area. In an unstable network, this message may also warn of extensive re-origination of LSA for some other reason. Contact your Cisco technical support representative to investigate such a case.

<code>%OSPF-4-INVALID_METRIC:</code> OSPF-%d Area %s: Router %i originating invalid type %d LSA, ID %i, Metric %d on Link ID %i Link Type %dExplanation The router indicated in this message has originated an LSA with an invalid metric. If this is an router LSA and the link metric is zero, routing loops and traffic loss could occur in the network.

Recommended Action Configure a valid metric for a given LSA type and link type on the router originating reported LSA.

Error Message

*OSPF-4-INV_LSA_BLD_FLG: Invalid build flag *x for LSA *i, type *dExplanation An internal error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPF-4-INV_LSA_BLD_FLG: Invalid build flag %x for LSA %i, type %d

Explanation An internal error occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

<code>%OSPF-4-LOW_NET_METRIC:</code> Network %i metric %d goes down. In range of summary %i %i with metric %d**Explanation** A software or hardware error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at

http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

<code>%OSPF-4-LOW_NET_METRIC:</code> Network %i metric %d goes down. In range of summary %i %i with metric %d

Recommended Action No action is required.

Error Message

*OSPF-4-NONEIGHBOR: Received *s from unknown neighbor *iExplanation An OSPF hello, database description, or database request packet was received, but the router could not identify the sender.

Recommended Action This situation should correct itself. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered.

Error Message

%OSPF-4-NONEIGHBOR: Received %s from unknown neighbor %i

Explanation OSPF hello, database description, or database request packet was received, but the router could not identify the sender.

Recommended Action This situation should correct itself. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at

http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%OSPF-4-NORTRID: OSPF process %d failed to allocate unique router-id and cannot start**Explanation** OSPF failed while attempting to allocate a unique router ID from the IP addresses of its interfaces.

Recommended Action Ensure that at least one interface is up and has a valid IP address. If there are multiple OSPF processes running on the router, each requires a unique router ID. Configure a unique router ID manually, using the **router-id** command or configure an interface in the same VRF table, using the **ip vrf forwarding** command to which the OSPF process belongs. Configure on that interface an IP address that is not used as a router ID by any other OSPF process.

Error Message

%OSPF-4-NORTRID: OSPF process %d failed to allocate unique router-id and cannot start

Explanation OSPF failed while attempting to allocate a unique router-id from the IP addresses of its interfaces.

Recommended Action Ensure that at least one interface is active (up) and has a valid IP address. If there are multiple OSPF processes running on the router, each requires a unique router-id. Configure a unique router-id manually, using the router-id A.B.C.D command or configure an interface in the same vrf table, using the ip vrf forwarding WORD command to which the OSPF process belongs. Configure on that interface an IP address which is not used as a router-id by any other OSPF process.

Error Message

%OSPF-4-NOTREDIST5: db_free: external LSA %i%m

Explanation An internal software error has resulted in the deletion of a self-originated type-5 LSA from the local database without its first being flushed from the other routers in the OSPF routing domain. This may result in a temporary increase in memory usage in the other routers.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%OSPF-4-NOTREDIST5: db_free: external LSA %i%m

Explanation An internal software error has resulted in a self-originated type-5 LSA being deleted from the local database without first being flushed from the other routers in the OSPF routing domain. This may result in a temporary increase in memory usage in the other routers.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPF-4-NO_IPADDRESS_ON_INT: No IP address for interface %s

Explanation Interface is not point-to-point and is unnumbered.

Recommended Action Change interface type or give the interface an IP address.

Error Message

%OSPF-4-NO_OUTPUTQ: Packet not written to the output queue **Explanation** An internal error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPF-4-NO_OUTPUTQ: Packet not written to the output queue

Explanation An internal error occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance,

open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

 $\$OSPF-4-NSSA_NO_FA$: OSPF process \$u lacks forwarding address for type 7 LSA \$i in NSSA \$s - P-bit cleared **Explanation** Due to the unavailability of a viable forwarding address in the NSSA area, the P-bit has been cleared and the NSSA translator does not translate the type 7 LSA to the type 5 LSA.

Recommended Action Configure at least one interface in the NSSA with an advertised IP address. A loopback is preferable so that advertisement will not be dependent on the underlying layer 2 state.

Error Message

%OSPF-4-NULL_LINKAGE: Doubly linked list linkage is NULL**Explanation** An internal error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

<code>%OSPF-4-NULL_LINKAGE: Doubly linked list linkage is NULL</code>

Explanation An internal error occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%OSPF-4-NULL_PREV_LINKAGE: Doubly linked list prev linkage is NULL %x

Explanation An internal error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPF-4-NULL_PREV_LINKAGE: Doubly linked list prev linkage is NULL %x

Explanation An internal error occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPF-4-OSPF_MAX_LSA: Maximum number of non self-generated LSA has been exceeded %s - %d LSAs**Explanation** Maximum number of non self-generated LSA has been exceeded.

Recommended Action Determine if a router in the network is generating a large number of LSAs as a result of a misconfiguration.

Error Message

%OSPF-4-OSPF_MAX_LSA: Maximum number of non self-generated LSA has been exceeded '[chars]' - [dec] LSAs

Explanation The maximum number of non-self-generated LSAs has been exceeded.

Recommended Action Check to see if a router in the network is generating a large number of LSAs as a result of a misconfiguration.

%OSPF-4-OSPF_MAX_LSA_THR: Threshold for maximum number of non self-generated LSA has been reached %s - %d LSAs**Explanation** Threshold for maximum number of non self-generated LSAs has been reached.

Recommended Action Determine if a router in the network is generating a large number of LSAs as a result of a misconfiguration.

Error Message

<code>%OSPF-4-OSPF_MAX_LSA_THR:</code> Threshold for maximum number of non self-generated LSA has been reached '[chars]' - [dec] LSAs

Explanation The threshold for the maximum number of non-self-generated LSA has been reached.

Recommended Action Check to see if a router in the network is generating a large number of LSAs as a result of a misconfiguration.

Error Message

*OSPF-4-RTRID_IN_USE: Router-ID *i is in use by ospf process *dExplanation An attempt was made to assign a Router ID which is in use by another process.

Recommended Action Configure another Router ID for one of the processes.

Error Message

%OSPF-4-RTRID_IN_USE: Router-ID %i is in use by ospf process %d

Explanation Attempted to assign a Router ID which is in use by another process.

Recommended Action Configure another Router ID for one of the processes.

Error Message

%OSPF-4-UNREC_TIMER: Unrecognized timer %d in OSPF %sExplanation An internal error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%OSPF-4-UNREC_TIMER: Unrecognized timer %d in OSPF %s

Explanation An internal error occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

<code>%OSPF-4-VIRTUAL_IN_NON_BACKBONE:</code> Virtual link information found in non-backbone area: <code>%sExplanation</code> An internal software error has caused this router to generate a router LSA that has a virtual link in a non-backbone area.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPF-4-VIRTUAL_IN_NON_BACKBONE: Virtual link information found in non-backbone area: %s

Explanation An internal software error has caused this router to generate a Router LSA that has a virtual link in a non-backbone area.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

```
%OSPF-4-WRONG_DEFAULT: Found generating default LSA with non-zero mask LSA type : [dec] Mask : [IP_address] metric : [int] area : [chars]
```

Explanation The router attempted to generate a default LSA with the wrong mask and, possibly, the wrong metric because of an internal software error.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%OSPF-5-ADJCHG: Process %d, Nbr %i on %s from %s to %s, %s
```

Explanation An OSPF neighbor has changed state. The message describes the change and the reason for it. This message appears only if the log-adjacency-changes command is configured for the OSPF process.

Recommended Action No action is required..

Error Message

```
%OSPF-6-AREACHG: %i%m changed from area %s to area %s
```

Explanation An OSPF configuration change has caused a network range to change areas.

Recommended Action No action is required.

Error Message

\$ OSPF-6-BADCHKSUM: Checksum Failure in database in area \$ s Link State Id \$ i Old Checksum \$ # x New Checksum \$ # x

Explanation OSPF has detected a checksum error in the database due to memory corruption.

Recommended Action Restart OSPF process.

Error Message

<code>%OSPF-6-BAD_LSA_COUNT:</code> OSPF-%d Area %s: LSA ID %i, Type %d, Adv-rtr %i, LSA counter %s **Explanation** An internal error has been self-corrected. This operation does not affect the operation.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying

information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support ospf commands and your pertinent troubleshooting logs.

Error Message

%OSPF-6-LRIB_WRONG_REFCNT: OSPF-[dec] Invalid reference count for [IP_address]/[dec]

Explanation Negative database reference count.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the show tech-support ospf command to gather data that may help identify the nature of the error. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

\$OSPF-6-MODECHG: Base topology enabled on interface \$s attached to MTR compatible mode area \$sExplanation The base topology is being enabled.

Recommended Action No action is required.

Error Message

%OSPF-6-NOSRCPDB: ex_route_callback(): Can't find the src protocol to redistribute net %i%m**Explanation** OSPF attempted to redistribute a route but could not find a valid source protocol.

Recommended Action No action is required.

Error Message

\$OSPF-6-NOSRCPDB: ex_route_callback(): Can't find the src protocol to redistribute net \$i\$m

Explanation OSPF attempted to redistribute a route but could not fine a valid source protocol.

Recommended Action No action is required.

%OSPF-6-PROC_REM_FROM_INT: OSPF process %d removed from interface %s

Explanation The OSPF process was removed from the interface due to IP VRF removal.

Recommended Action No action is required.

Error Message

%OSPF-6-PROC_REM_FROM_INT: OSPF process [dec] removed from interface [chars]

Explanation The OSPF process was removed from the interface due to IP VRF removal.

Recommended Action No action is required.

Error Message

<code>%OSPF-6-UNREC_VIRT_INT_TYPE:</code> Unrecognized virtual interface <code>%s. Treat it as loopback stub route</code>

Explanation The virtual interface type was not recognized by OSPF, so it will be treated as a loopback interface stub route.

Recommended Action No action is required.

Error Message

%OSPF-6-ZERO_BANDWIDTH: interface %s has zero bandwidth

Explanation The interface has reported its bandwidth as zero.

Recommended Action No action is required.

OSPFv3 Messages

The following are the Open Shortest Path First Version 3messages.

Error Message

%OSPFv3-3-CFG_NBR_ALLOC_FAILED: Could not allocate or find the neighbor

Explanation An internal error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered.

%OSPFv3-3-CFG_NBR_ALLOC_FAILED: Could not allocate or find the neighbor

Explanation An internal error occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OSPFv3-3-DBEXIST: DB already exist : area %s lsid %i adv %i type 0x%x

Explanation OSPF is unable to locate the LSA. This condition could lead to a memory leak.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPFv3-3-DBEXIST: area [chars] lsid [IP_address] mask [IP_address] adv
[IP_address] type [hex]

Explanation The OSPF has a problem locating the LSA, which could lead to a memory leak.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%OSPFv3-3-INIT_IDB: OSPF is enabled on [chars] during idb initialization

Explanation An internal error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPFv3-3-INTERNALERR: Internal error: [chars]

Explanation An internal software error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPFv3-3-INT_ATTACHED_MULTI_AREAS: Interface %s is attached to more than one area

Explanation The interface is on the interface list for an area other than the one to which the interface links.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%OSPFv3-3-INT_ATTACHED_MULTI_AREAS: Interface %s is attached to more than one area

Explanation The interface is on the interface list for an area other than the one which the interface links to.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPFv3-3-INT_INIT_FAILED: Init failed for interface %s, %s.

Explanation The interface initialization failed. Possible reasons: 1) The area to which the interface is being attached is being deleted. 2) It was not possible to create the link scope database 3) It was not possible to create a neighbor datablock for the local router

Recommended Action Remove the configuration command that covers the interface and then try it again. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OSPFv3-3-INVALID_ENCR_KEY: Invalid encrypted key [chars].

Explanation The specified encrypted key is not valid.

Recommended Action Either specify a cleartext key and enter the service password-encryption command for encryption, or ensure that the specified encrypted key is valid. If the specified encrypted key is not valid, an error message will be displayed during system configuration.

%OSPFv3-3-IPSEC_CLOSE_SS_ERROR: Unable to close secure socket with SPI [int] on interface [chars]

Explanation An IPsec API error occurred. This message indicates an internal error.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OSPFv3-3-IPSEC_CREATE_POLICY_ERROR: [chars] error occured when attempting to create an IPsec policy for SPI [int]

Explanation An IPsec API error occurred. This message indicates an internal error.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OSPFv3-3-IPSEC_ERROR_MSG_ABORT: IPsec sent a [chars] message [chars] to OSPFv3 for interface [chars]. Recovery aborted

Explanation An internal software error has occurred. The maximum number of recovery attempts have been exceeded.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%OSPFv3-3-IPSEC_ERROR_MSG_RETRY: IPsec sent a [chars] message [chars] to OSPFv3 for interface [chars]. Recovery attempt [dec]

Explanation An internal error occurred. The system is attempting to re-open the secure socket.

Recommended Action The system is attempting to recover. No action is required.

Error Message

%OSPFv3-3-IPSEC_GENERAL_ERROR: IPsec reported a GENERAL ERROR : message [chars],
count [dec]

Explanation An internal error occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

<code>%OSPFv3-3-IPSEC_POLICY_ALREADY_EXIST: SPI [int] is already in use with ospf process [dec].</code>

Explanation An attempt was made to use a SPI that has already been used.

Recommended Action Choose a different SPI.

Error Message

%OSPFv3-3-IPSEC_POLICY_INVALID_KEY_LEN: The key length used with SPI [int] is not valid

Explanation The key length was incorrect.

Recommended Action Choose a valid IPsec key. An IPsec authentication key must be 32(MD5) or 40(SHA-1) hexidecimal digits long.

Error Message

<code>%OSPFv3-3-IPSEC_POLICY_NOT_EXIST: SPI [int] is not being used by ospf process [dec].</code>

Explanation An attempt was made to unconfigure a SPI that is not being used with OSPFv3.

Recommended Action Enter a show command to determine which SPIs are used by OSPFv3.

%OSPFv3-3-IPSEC_POLICY_SPI_IN_USE: SPI [int] is already in use by a process other than ospf process [dec].

Explanation An attempt was made to use a SPI that has already been used.

Recommended Action Choose a different SPI. Enter the show crypto ipv6 ipsec sa command to view a list of SPIs that are already being used.

Error Message

%OSPFv3-3-IPSEC_POLICY_SPI_REUSE: [chars] [chars] is already configured with SPI [int].

Explanation An attempt was made to use a SPI that has already been used.

Recommended Action Unconfigure the SPI first, or choose a different one.

Error Message

%OSPFv3-3-IPSEC_POLICY_STILL_IN_USE: The policy for SPI [int] could not be removed because it is in use.

Explanation An attempt was made to remove the policy for the indicated SPI, butthe policy was still being used by a secure socket.

Recommended Action No action is required.

Error Message

%OSPFv3-3-IPSEC_REGISTER_CLIENT: OSPFv3 was unable to register with IPsec

Explanation An internal error occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OSPFv3-3-IPSEC_REMOVE_POLICY_ERROR: [chars] error occured when attemtping to remove the IPsec policy with SPI [int]

Explanation An IPsec API error occurred. This message indicates an internal error

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying

information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OSPFv3-3-NOBACKBONE: Flagged as being an ABR without a backbone area

Explanation The router was flagged as an Area Border Router (ABR) without backbone area in the router.

Recommended Action Restart the OSPF process.

Error Message

%OSPFv3-3-NOBACKBONE: Flagged as being an ABR without a backbone area

Explanation The router has been flagged as an ABR without a backbone area in the router.

Recommended Action Restart the OSPF process.

Error Message

%OSPFv3-3-NOSELF: if [chars] if_state [dec]

Explanation An internal error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

 $\$OSPFv3-3-NO_SNMP_IFINDEX$: Interface [chars] does not have an SNMP MIB ifIndex and has been disabled

Explanation The OSPF process has been configured to use the SNMP MIB ifIndex value for the interface IDs. However, the ifIndex is not set on this interface, so the interface cannot be enabled.

Recommended Action Unconfigure interface-id snmp-if-index for this OSPF process.

Recommended Action

%OSPFv3-3-RDB_NO_LSA: lsid [IP_address] adv [IP_address] type [hex] gateway
[IP_address] metric [dec] network [IP_address] mask [IP_address] protocol [hex]
attr [hex] net-metric [dec]

Explanation The OSPF found an inconsistency between its database and the IP routing table.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPFv3-3-RECONF_VL: OSPF process [dec] is changing router-id. Reconfigure virtual link neighbors with our new router-id

Explanation The OSPF process is being reset and selecting a new router ID. The reset brings down all virtual links.

Recommended Action Change virtual link configuration on all the virtual link neighbors, to reflect the new router ID, and to make the links work again.

Error Message

%OSPFv3-3-UNEXPECTED_MESSAGE: OSPFv3 has received an unexpected message: [hex] /
[hex]

Explanation OSPFv3 has received an unexpected interprocess message.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

%OSPFv3-3-UNKNOWNSTATE: Reached unknown state in neighbor state machine

Explanation An internal software error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPFv3-3-UNKNOWNSTATE: Reached unknown state in neighbor state machine

Explanation An internal software error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPFv3-4-AREA_MISMATCH: Received packet with incorrect area from[ipv6_addr],
[chars], area [IP_address], packet area [IP_address]

Explanation An OSPF packet was received with an area ID in its header that does not match the area of this interface.

Recommended Action Check the OSPF configuration of the receiver and the sender for inconsistency.

Error Message

 $\$OSPFv3-4-ASBR_WITHOUT_VALID_AREA$: Router is currently an ASBR while having only one area which is a stub area

Explanation An ASBR must be attached to an area which can carry AS External or NSSA LSAs

Recommended Action Make the area to which the router is attached into an NSSA or regular area.

%OSPFv3-4-BADLENGTH: Invalid length %d in OSPF packet type %d from %P (ID %i), %s

Explanation The system received an OSPF packet with a length field of less than normal header size or inconsistent with the size of the IP packet in which it arrived. This indicates an error in the sender of the packet.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPFv3-4-BADLENGTH: Invalid length [dec] in OSPF packet fromUnrecognized format
' %P' (ID [IP_address]), [chars]

Explanation The system received an OSPF packet with an invalid length field. Either the header size for the packet is less than normal, or the header is inconsistent with the size of the IP packet in which the packet arrived. This message indicates an error in the packet sender.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%OSPFv3-4-BADLSATYPE: Invalid lsa: [chars]: Type [hex], LSID [int] from [IP_address], Unrecognized format ` %P', [chars]

Explanation The router has received an invalid LSA. The cause of the error is either memory corruption or an unexpected behavior on a router.

Recommended Action From a neighboring address, locate the problem router and do the following actions: a.Collect a running configuration of the router by entering the show running-config command.

Recommended Action b.Enter the show ip ospf database command to gather data that might help identify the nature of the error.

Recommended Action c.Enter the show ip ospf database link-state-id, where link-state-id is the IP address of the invalid LSA.

Recommended Action d.Enter the show logging command to gather further data about the error.

Recommended Action e.Reboot the router.

Recommended Action If you cannot determine the nature of the error from the collected information, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

<code>%OSPFv3-4-CFG_NBR_INVAL_NBMA_OPT:</code> Can not use configured neighbor: cost and database-filter options are allowed only for a point-to-multipoint network

Explanation The configured neighbor was found on an NBMA network and either the cost or database-filter option was configured. These options are only allowed on point-to-multipoint type networks.

Recommended Action Check the configuration options for the neighbor command and correct the options or the network type for the neighbor's interface.

Error Message

%OSPFv3-4-CFG_NBR_INVAL_NBMA_OPT: Can not use configured neighbor: cost and database-filter options are allowed only for a point-to-multipoint network

Explanation The configured neighbor was found on an NBMA network and either the cost or database-filter option was configured. These options are only allowed on point-to-multipoint type networks.

Recommended Action Check the configuration options for the neighbor command and correct the options or the network type for the neighbor's interface.

%OSPFv3-4-CFG_NBR_INVAL_NET_TYPE: Can not use configured neighbor: neighbor command is allowed only on NBMA and point-to-multipoint networks

Explanation The configured neighbor was found on a network for which the network type was neither NBMA or point-to-multipoint

Recommended Action No action is required.

Error Message

%OSPFv3-4-CFG_NBR_INVAL_P2MP_OPT: Can not use configured neighbor: poll and priority options are allowed only for a NBMA network

Explanation The configured neighbor was found on a point-to-multipoint network and either the poll or priority option was configured. These options are only allowed on NBMA type networks.

Recommended Action Check the configuration options for the neighbor command and correct the options or the network type for the neighbor's interface.

Error Message

%OSPFv3-4-CFG_NBR_NOT_NBMA_NET: Neighbor command allowed only on NBMA networks

Explanation The **neighbor** command is allowed only on NBMA networks.

Recommended Action Check the configuration options for the neighbor command and correct the options or the network type for the neighbor's interface.

Error Message

%OSPFv3-4-CFG_NBR_NOT_NBMA_NET: Neighbor command allowed only on NBMA networks

Explanation Neighbor command allowed only on NBMA networks.

Recommended Action Check the configuration options for the neighbor command and correct the options or the network type for the neighbor's interface.

Error Message

%OSPFv3-4-CFG_NBR_P2MP_NEEDS_COST: Can not use configured neighbor: cost or database-filter option is required for point-to-multipoint broadcast network

Explanation The configured neighbor was found on a point-to-multipoint broadcast network. Either the cost or database-filter option must be configured.

Recommended Action Check the configuration options for the neighbor command and correct the options or the network type for the neighbor's interface.

%OSPFv3-4-CFG_NBR_P2MP_NEEDS_COST: Can not use configured neighbor: cost or database-filter option is required for point-to-multipoint broadcast network

Explanation The configured neighbor was found on a point-to-multipoint broadcast network. Either the cost or database-filter option needs to be configured.

Recommended Action Check the configuration options for the neighbor command and correct the options or the network type for the neighbor's interface.

Error Message

%OSPFv3-4-DBD_ALLOC_FAIL: Could not allocate DBD packet

Explanation An internal error occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPFv3-4-DB_NOT_FOUND: Can't find LSA database type %x, area %x , interface %x

Explanation An internal error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPFv3-4-DB_NOT_FOUND: Can't find LSA database type %x, area %x , interface %x

Explanation An internal error occured.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying

information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPFv3-4-DUP_RTRID_AREA: Detected router with duplicate router ID %i in area %s

Explanation OSPF has received a hello packet from a neighbor that has the same router ID as this routing process. A full adjacency cannot be established.

Recommended Action The OSPF router ID should be unique. Change the neighbor's router ID.

Error Message

%OSPFv3-4-DUP_RTRID_AREA: Detected router with duplicate router ID [IP_address] in area [chars]

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

%OSPFv3-4-DUP_RTRID_AS: Detected router with duplicate router ID [IP_address] in Type-4 LSA advertised by [IP_address]

Explanation The OSPF received a hello packet from a neighbor that has the same router ID as this routing process. A full adjacency cannot be established.

Recommended Action The OSPF router ID must be unique. Change the neighbor's router ID.

Error Message

%OSPFv3-4-DUP_RTRID_NBR: OSPF detected duplicate router-id [IP_address] fromUnrecognized format `%P' on interface [chars]

Explanation Unavailable.

Recommended Action Unavailable.

%OSPFv3-4-ERRRCV: Received invalid packet: [chars] fromUnrecognized format `%P',
[chars]

Explanation An invalid OSPF packet was received. Details are included in the error message. The cause might be a misconfigured OSPF or an internal error in the sender.

Recommended Action Check the OSPF configuration of the receiver and the sender for an inconsistency.

Error Message

%OSPFv3-4-INV_LSA_BLD_FLG: Invalid build flag %x for LSA %i, type 0x%x

Explanation An internal error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPFv3-4-INV_LSA_BLD_FLG: Invalid build flag %x for LSA %i, type 0x%x

Explanation An internal error occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

%OSPFv3-4-NONEIGHBOR: Received [chars] from unknown neighbor [IP_address]

Explanation An OSPF hello, database description, or database request packet has been received by the router, but the router could not identify the sender.

Recommended Action This situation should self-correct. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPFv3-4-NORTRID: OSPFv3 process [dec] could not pick a router-id,
please configure manually

Explanation An OSPFv3 failed while attempting to allocate a router ID from the IP address of one of its interfaces.

Recommended Action Ensure that at least one interface is up and has a valid IP address. If there are multiple OSPF processes running on the router, each process requires a unique router ID. Enough interfaces must be up so that each interface can obtain a router ID.

Error Message

%OSPFv3-4-NO_GLOBAL_ADDR: Could not select a global IPv6 address. Virtual links require at least one global IPv6 address.

Explanation A virtual link was configured. For the virtual link to function, a global IPv6 address must be available. However, no global IPv6 address could be found on the router.

Recommended Action Configure a global IPv6 address on an interface on this router.

Error Message

%OSPFv3-4-NO_OUTPUTQ: Packet not written to the output queue

Explanation An internal error occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%OSPFv3-4-NULL_LINKAGE: Doubly linked list linkage is NULL

Explanation An internal error occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPFv3-4-NULL_PREV_LINKAGE: Doubly linked list prev linkage is NULL %x

Explanation An internal error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPFv3-4-NULL_PREV_LINKAGE: Doubly linked list prev linkage is NULL %x

Explanation An internal error occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%OSPFv3-4-RTRID_IN_USE: Router-ID %i is in use by ospf process %d

Explanation Attempted to assign a Router ID which is in use by another process

Recommended Action Configure another Router ID for one of the processes.

Error Message

%OSPFv3-4-TIMER_ERROR: Error for timer %d in OSPF process %s

Explanation An internal error occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

 $\$OSPFv3-4-TWO_INT_ON_LINK$: Multiple interfaces (\$s/\$s) on a single link detected. This is not supported

Explanation OSPFv3 enabled on multiple interfaces which are on the same link is not supported.

Recommended Action OSPFv3 should be disabled or made passive on all but one of the interfaces.

Error Message

%OSPFv3-4-UNREC_TIMER: Unrecognized timer %d in OSPF %s

Explanation An internal error occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

 $\$OSPFv3-4-VIRTUAL_IN_NON_BACKBONE$: Virtual link information found in non-backbone area: \$sExplanation An internal error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%OSPFv3-4-VIRTUAL_IN_NON_BACKBONE: Virtual link information found in non-backbone area: [chars]

Explanation An internal error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%OSPFv3-4-WRONG_DEFAULT: Found generating default LSA with non-zero mask LSA type : [hex] Mask : [IP_address] metric : [int] area : [chars]
```

Explanation The router tried to generate the default LSA with a wrong mask and possibly a wrong metric because of an internal software error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%OSPFv3-5-ADJCHG: Process [dec], Nbr [IP_address] on [chars] from [chars] to [chars], [chars]

Explanation An OSPF neighbor has changed state. The message describes the change and the reason for it. This message appears only if the log-adjacency-changes command is configured for the OSPF process.

Recommended Action No action is required.

Error Message

%OSPFv3-6-AREACHG: [IP_address][IP_netmask] changed from area [chars] to area [chars]

Explanation An OSPF configuration change has caused a network range to change areas.

Recommended Action No action is required.

Error Message

%OSPFv3-6-BADCHKSUM: Checksum Failure in database in area [chars] Link State Id [IP_address] Old Checksum [hex] New Checksum [hex]

Explanation OSPF has detected a checksum error in the database because of memory corruption.

Recommended Action Restart the OSPF process.

Error Message

%OSPFv3-6-UNREC_VIRT_INT_TYPE: Unrecognized virtual interface %s. Treat it as loopback stub route

Explanation The virtual interface type was not recognized by OSPFv3, so it will be treated as a loopback interface stub route.

Recommended Action No action is required.

%OSPFv3-6-ZERO_BANDWIDTH: interface [chars] has zero bandwidth

Explanation The interface reports zero bandwidth.

Recommended Action No action is required.

Error Message

<code>%OTV_APP-3-INVALID_CLIENT_REG:</code> OTV was unable to register with RIB

Explanation An Overlay Transport Virtualization (OTV) application routine tried to register as a client with the Multilayer Routing Information Base (MLRIB).

Recommended Action Reboot the device. If the error persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

<code>%OTV_APP-3-INVALID_DELETE_MAC_FLOOD:</code> otv mac flood [enet] was not deleted from the RIB, the return code was [hex]

Explanation An Overlay Transport Virtualization (OTV) application routine tried to delete a route from the database causing an error in the Routing Information Base (RIB).

Recommended Action Reconfigure the the otv mac flood command, and try deleting the command. If the error persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OTV_APP-3-INVALID_EVENT_THREAD: An OTV Application routine was called by an invalid thread

Explanation An Overlay Transport Virtualization (OTV) application routine was called incorrectly causing an internal error.

Recommended Action Reboot the device. If the error persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using

the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OTV_APP-3-INVALID_MCAST_MAPPING: OTV was unable to process ISIS mapping received

Explanation An Intermediate System-to-Intermediate System (IS-IS) error occurred when the IS-IS tried to send an invalid mapping to the Overlay Transport Virtualization (OTV) application.

Recommended Action Reboot the device. If the error persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OTV_APP-3-INVALID_ROUTE_REDIST_REG: OTV was unable to register for route redistribution

Explanation An Overlay Transport Virtualization (OTV) application routine tried to send a redistribution request causing an internal error in the Routing Information Base (RIB).

Recommended Action Reconfigure the overlay. If the error persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

<code>%OTV_APP-3-INVALID_UPDATE_MAC_FLOOD:</code> otv mac flood [enet] was not added to the RIB, the return code was [hex]

Explanation An Overlay Transport Virtualization (OTV) application routine tried to add a route to the database causing an internal error in the Routing Information Base (RIB).

Recommended Action Enter the **otv mac flood** command. If the error persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/cgi-bin/Support/Bugtool/launch bugtool.pl. If you still require assistance,

open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

OUTPUT CLOCK SELECT Messages

Error Message

%OUTPUT_CLK_SEL-3-GEN_FRM_FRCL: BITS Framer Receive Carrier Loss

Explanation Interrupt changes occurred.

Recommended Action No action is required.

Error Message

%OUTPUT_CLK_SEL-3-GEN_FRM_RLOS: BITS Receive Loss of Sync

Explanation Interrupt changes occurred.

Recommended Action No action is required.

Error Message

%OUTPUT_CLK_SEL-3-GEN_FRM_RUA1: BITS Receive Unframed All One's (T1 Blue Alarm, E1 AIS)

Explanation Interrupt changes occurred.

Recommended Action No action is required.

Error Message

 $OUTPUT_CLK_SEL-6-T4DPLL_CLK_STATE_CHANGE: Output clock state changed to [chars].$

Explanation The output clock state changed.

Recommended Action No action is required.