MMLS Messages

This section contains Multicast Multilayer Switching (MMLS) messages.

MMLS-3

Error Message %MMLS-3-ICROIF_BLOCK_ALLOC_FAILED: Allocation of %s block of indices
for egress distribution over fabric failed

Explanation The allocation of the block of indices used for egress distribution over the fabric has failed. As a result, the system will not be able to work in egress replication mode. This condition could be caused by a shortage of hardware resources during boot up or at the time when the first block of indices is completely consumed. A shortage of hardware resources might be caused by having too many VLANs configured.

Recommended Action Reduce the number of VLANs in the system by entering the **no vlan {vlan_id}** command and reloading the system, or configure ingress replication mode by entering the **mls ip multicast replication-mode ingress** command. Ingress replication mode does not use egress distribution indices.

MMLS-4

Error Message %MMLS-4-ICROIF_INDICES_EXHAUSTED: Unable to allocate index for egress distribution over fabric

Explanation The indices used for egress distribution over the fabric are exhausted and the system is currently unable to allocate an index. An index is allocated for each unique combination of flow over the fabric and is not freed upon removal of all shortcuts using it. An index-freeing mechanism operates when a threshold for freeing up unused indices is reached. If the number of used indices stays above the threshold after collection of unused indices, another block (up to a maximum of two blocks) of 256 indices is allocated.

Recommended Action You may not be required to take any action, as the index-freeing mechanism should take care of freeing up unused indices. If the problem remains, try reducing the number of unique combination of flows over the fabric created by the presence of multicast sources and receivers on different line cards.

Error Message %MMLS-4-VLAN_2K_SR_TR_INSTALL_FAILED: Multicast Multi-Layer
Switching: Failed to install service reflect translation, hardware resource
unavailable

Explanation The Multicast Service Reflect translation cannot be installed in hardware as a required hardware resource is unavailable.

Recommended Action Removing tunnel interfaces or reducing the number of service reflect translations would help solve the problem.

MMLS-6

Error Message %MMLS-6-ADJ_ALLOC_FAILURE: Failed to allocate Adjacency for the
multicast flow ([IP_address], [IP_address])

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

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

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

Explanation The system limit of maximum adjacencies for bidirectional shortcuts has been exceeded. As a result, any new multicast flows will be switched by the software.

Recommended Action The number of bidirectional multicast flows is 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 ([dec]) entries.

Explanation The maximum FIB entry limit has been exceeded, so FIB entries cannot be allocated by the MMLS.

Recommended Action The total number of multicast shortcuts is 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-MCAST_L3FLOW: %s from the Route Processor for Source %i Group %i vlan %d

Explanation A multicast flow has been installed or deleted.

Recommended Action No action is required.

Error Message %MMLS-6-MCAST_STATUS: IP Multicast Multilayer Switching is %sabled

Explanation This message indicates whether the multicast Layer 3 multicast feature is enabled or disabled.

Recommended Action No action is required.

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

Explanation The maximum MET entry limit has been exceeded, so MET entries cannot be allocated by the MMLS.

Recommended Action The total number of OIFs is too large to fit in the MET table. Subsequent shortcuts or OIFs will be switched by the software. There is no workaround.

Error Message %MMLS-6-MMLS_EGRESS_INCAPABLE_LC_INSERTED: MMLS: Egress incapable
line card ([dec]) inserted in forced egress replication mode

Explanation An egress-incapable line card 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 Verify that there is no multicast traffic going through this egress-incapable line card.

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

Explanation There is at least one line card that is egress incapable in the system, but forced egress replication mode is configured on the system. Multicast traffic must not be sourced on the egress-incapable line card.

Recommended Action Verify that there is no multicast traffic going through this egress-incapable line card.

Error Message %MMLS-6-MMLS_FSTATS_MAX_PENDING_MSGS: Flow stats enqueued messages count([dec]) has reached the maximum and would be reset to [dec]

Explanation This message indicates that flow stats pending messages count has reached the maximum. To avoid further flow stats messages from being dropped, the counter would be reset to match the current pending messages count of the ICCQ.

Recommended Action This message is provided for information only.

Error Message %MMLS-6-MMLS_HALF_MET: MMLS: IPv6 multicast enabled on supervisor uplinks. Available MET space on supervisors is halved

Explanation The MET space is being halved to enable IPv6 on supervisor engine uplinks.

Recommended Action No action is required.

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

Explanation There is at least one legacy line card in the system. Therefore, the system cannot operate in egress replication mode when the system is configured for forced egress replication mode.

Recommended Action Remove the legacy line card(s) if you want the system to operate in forced egress replication mode.

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

Explanation The system limit of maximum adjacencies for multicast shortcuts with the same RPF has been exceeded. As a result, any new multicast flows 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 ([dec]) RPs for VPN: ([dec]). Shortcuts for RP: ([IP_address]) will be software switched.

Explanation The system limit of four RPs per VPN has been exceeded. As a result, the multicast flows for the groups served by this RP will be software-switched.

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

Error Message %MMLS-6-VLAN_ADD_FAILURE_ON_MET_FULL: Error adding vlan [dec] to the
MET table of some shortcuts

Explanation The MET table is full and the system is 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 must be reduced. Removing some VLANs or switching to ingress replication mode will solve the problem.

MMLS_RATE Messages

This section contains Multicast Multilayer Switching Rate Limiting (MMLS_RATE) messages.

MMLS_RATE-3

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

Explanation The multicast partial SC rate limiter could not be configured because of an error that was returned from the switch processor.

Recommended Action The LTL index for the partial SC rate limiter might not have initialized yet. Wait several minutes, and try to configure the rate limiter again.

MPLS_ADJ_SB Messages

The following are MPLS Adjacency Subblock messages.

MPLS ADJ SB-4

Error Message %MPLS_ADJ_SB-4-NO_BACKUP_INTF: [chars] - ifnum [dec]

Explanation Backup interface cannot be programmed.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

MPLS_IPRM Messages

This section contains MPLS IP rewrite manager (IPRM) messages.

MPLS IPRM-3

```
Error Message %MPLS_IPRM-3-DB: [chars]
```

Explanation There is an inconsistency in the information required to request labels from or to 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/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 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 required to request labels from or to 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/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 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 required to populate 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/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 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_TABLE: [chars]

Explanation There is an inconsistency in the information about a (VRF) table ID required to request labels from or to 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/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 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 required to populate 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/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 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.

Error Message %MPLS_IPRM-3-PATH_LABEL_DEL: [chars]

Explanation An attempt to delete 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/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 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-PATH_LABEL_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/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 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-PATH_LABEL_UPD: [chars]

Explanation An attempt to update MPLS forwarding information for the specified prefix has failed.

Error Message %MPLS_IPRM-3-WALK: [chars]

Explanation A request by an IP label distribution module (for example, LDP, BGP) to walk a CEF table cannot be handled.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 Messages

This section contains MPLS Forwarding Infrastructure (MFI) static application messages.

MPLSMFISTATIC-3

Error Message MPLSMFISTATIC-3-CHUNKMGR: [chars] [hex]

Explanation An MPLS MFI static application chunk manager error has occurred.

Recommended Action This problem may be due to a low memory condition on the device. Check system memory and minimum memory requirements for this release and configuration, and add memory if required. If memory appears to be sufficient and 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 information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show process memory, show version and show running-config commands and your pertinent troubleshooting logs.

Error Message MPLSMFISTATIC-3-FCALLFAILED: [chars]

Explanation A static application function call 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/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 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.

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/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 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.

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/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 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.

MPLSOAM Messages

This section contains Multiprotocol Label Switching (MPLS) Operations, Administration, and Maintenance (OAM) messages.

MPLSOAM-3

Error Message %MPLSOAM-3-XDR_COMM: %s:0x%x 0x%x

Explanation The XDR communication module reports an unexpected RP/LC XDR condition encountered in the MPLS OAM software. This condition may result in MPLS OAM FIB subblocks becoming out of synchronization between the RP and the line card. This condition should not affect overall system 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/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 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.

MPLS_PACKET Messages

This section contains MPLS packet messages.

MPLS PACKET-3

Error Message %MPLS_PACKET-3-FWDDISABLE: MPLS [chars] forwarding path disabled

Explanation The MPLS forwarding plane has been disabled.

Recommended Action This log entry is informational only. No action is required.

Error Message %MPLS_PACKET-3-FWDREENABLE: MPLS [chars] forwarding path reenabled

Explanation The MPLS forwarding plane has been reenabled.

Recommended Action This log entry is informational only. No action is required.

Error Message %MPLS_PACKET-3-LABELCACHE: [chars] [dec]/[dec]

Explanation An MPLS label cache 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/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 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.

MPLS PACKET-4

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 may appear when an MPLS application is disabled on a interface, and should disappear when the upstream neighbor has reprogrammed its CEF and MPLS entries.

Recommended Action If an MPLS application has just been disabled and traffic is flowing, this message is expected and should be ignored. If the message recurs in steady state, the operator should monitor the network for attacks and report the occurrence to Cisco.

MPLS_TE Messages

This section contains MPLS Label Switch Path (LSP) Tunnel messages.

MPLS_TE-2

Error Message %MPLS_TE-2-ADJ_WALK_ERR: [chars]

Explanation An error occurred during a bundle adjacency walk.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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-2-BUNDLE_INSERT: [chars][chars]

Explanation A 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. 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 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-2-UNSUPPORTED_LINK_TYPE: [chars]

Explanation An unsupported link type 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 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.

MPLS_TE-3

Error Message %MPLS_TE-3-LSDERROR: [chars]: [chars] [chars]

Explanation A traffic engineering request to the label switching database 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/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 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.

MPLS_TE_AUTOMESH Messages

This section contains MPLS Traffic Engineering (TE) Auto-Tunnel Primary and Backup log and error messages.

MPLS TE AUTOMESH-5

Error Message %MPLS_TE_AUTOMESH-5-AUTOTEMPLATE_HWIDB_DELETE: Failed to delete hwidb for Auto-Template %d index %d

Explanation The deletion of a hardware interface descriptor block (HWIDB) for an auto-template interface 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 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.

MPLS_TE_AUTO_TUN-3

Error Message %MPLS_TE_AUTO_TUN-3-UNAVAILABLE: 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 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 %MPLS_TE_AUTO_TUN-3-UNAVAILABLE: 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 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 %MPLS_TE_AUTO_TUN-3-UNAVAILABLE: 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 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.

MPLS_TE_AUTO_TUN-4

Error Message %MPLS_TE_AUTO_TUN-4-UNAVAILABLE: 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 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.

MPLS_TE_LM Messages

This section contains MPLS TE Link Management messages.

MPLS TE LM-3

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 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/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 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. Also provide a topology diagram showing the hops in the LSP, marking each hop with the vendor and software, and identify which hop is the Cisco IOS device issuing the error message.

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 and 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 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/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 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. Also provide a topology diagram showing the hops in the LSP, marking each hop with the vendor and software, and identify which hop is the Cisco 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 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/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 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. Also provide a topology diagram showing the hops in the LSP, marking each hop with the vendor and software, and identify which hop is the Cisco IOS device issuing the error message.

MPLS_TE_LM-5

Error Message %MPLS_TE_LM-5-UNAVAILABLE: Clear MPLS TE Link Management counters by
%s

Explanation The MPLS TE Link Management counters have been cleared

Recommended Action LOG_STD_NO_ACTION

MPLS TE PCALC-2

Error Message %MPLS_TE_PCALC-2-UNAVAILABLE: %s %d

Explanation A failure at an attempt to alloc memory was detected

Error Message %MPLS_TE_PCALC-2-UNAVAILABLE: %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-UNAVAILABLE: %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-UNAVAILABLE: Invalid router id (%i) received from %s in fragment %lu

Explanation Received an Invalid Router LSA. LSA should not contain a Router id of zero. The cause of this problem may be misconfiguration, memory corruption or unexpected behaviour on a router

Recommended Action Locate the problem router and check the configuration. To determine what is causing this problem, call your Cisco technical support representative for assistance.

Error Message %MPLS_TE_PCALC-2-UNAVAILABLE: Router id (%i) received from %s in
fragment %lu, previously received in fragment %lu

Explanation Received Router ID in multiple fragments

Recommended Action Locate the problem router and contact your Cisco technical support representative for assistance.

MPLS TE PCALC-3

Error Message %MPLS_TE_PCALC-3-UNAVAILABLE: %s %s

Explanation An internal inconsistency was detected when an attempt was made to establish handle received lsa for MPLS TE topology database.

Error Message %MPLS_TE_PCALC-3-UNAVAILABLE: %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 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 %MPLS_TE_PCALC-3-UNAVAILABLE: 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 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.

MPLS_VPN_HA Messages

This section contains MPLS HA messages for checkpointing label bindings.

MPLS VPN HA-3

Error Message %MPLS_VPN_HA-3-CF_GEN_ERROR: [chars]

Explanation A general error occurred related to the MPLS VPN HA client 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/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 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-CLIENTREG: [chars]

Explanation The MPLS VPN HA failed to register to 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/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 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 An error occurred related to an MPLS VPN HA checkpoint database 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/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 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-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

Error Message %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/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 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/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 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 Messages

This section contains MPLS VPN ISSU client messages.

MPLS VPN ISSU-3

Error Message %MPLS_VPN_ISSU-3-CF_ERR: [chars] [hex]

Explanation An error occurred related to the MPLS VPN ISSU client 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/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 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_ISSU-3-GENERR: [chars]

Explanation An error occurred related to the MPLS VPN ISSU 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/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 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_ISSU-3-ISSU_RC_ERR: [chars] [chars]

Explanation An error occurred related to the MPLS VPN ISSU 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/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 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-3

Error Message %MPOA-3-UNAVAILABLE: %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.

Error Message %MPOA-3-UNAVAILABLE: %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-UNAVAILABLE: %s

Explanation A software error has occurred in the multiprotocol-over-ATM subsystem.

MPOA-4

Error Message %MPOA-4-UNAVAILABLE: %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.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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-4-UNAVAILABLE: %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.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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-5

Error Message %MPOA-5-UNAVAILABLE: %s

Explanation A multiprotocol-over-ATM entity was brought up or down. This is only a status message.

Recommended Action LOG_STD_NO_ACTION

Error Message %MPOA-6-UNAVAILABLE: %s

Explanation This is a multiprotocol-over-ATM client (MPC) status/information message

Recommended Action LOG_STD_NO_ACTION

Error Message %MPOA-6-UNAVAILABLE: %s

Explanation This is a multiprotocol-over-ATM server (MPS) status/information message

 $\textbf{Recommended Action} \quad LOG_STD_NO_ACTION$

MRIB_PROXY Messages

This section contains Multicast Routing Information Base proxy (MRIB_PROXY) messages.

MRIB_PROXY-2

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.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %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.

Error Message %MRIB_PROXY-2-MRIB_LC_FAILED_IDB_MAP: LC failed in mapping interface
number [dec]

Explanation The line card failed in mapping an interface from the global representation to the local 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 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 %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 has failed to get IPC acknowledgement.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %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 has failed to open an IPC port towards the route processor.

Error Message %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 has 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/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 %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 may now be inconsistent or frozen.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %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 to send the ready message.

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

Error Message %MRIB_PROXY-2-MRIB_LC_UPDATE_IGNORED: LC in slot [dec] ignored one or more mroute updates

Explanation The line card ignored one or more mroute updates because the buffer containing them failed a sanity check. The line card MFIB state may now be inconsistent.

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 %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 has 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/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 %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 one, or vice versa.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %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 get an IPC acknowledgement.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %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 interprocess communications 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/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 %MRIB_PROXY-2-MRIB_RP_FAILED_LC_DIST_MODE_INIT_PROC: RP failed in
creating distribute mode init process for a lineard, slot = [dec]

Explanation The route processor failed to create a distribute mode initialization process for a line 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 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 %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.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %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 open line card port information for distributed mode.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %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 has failed in sending a remote procedure call reply to a line card. This is normal after line card removal or reset. At other times, data loss or mroute state inconsistency may result.

MROUTE Messages

This section contains MROUTE messages.

MROUTE-2

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 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

Error Message %MROUTE-3-IGMP_NOT_FOUND: IGMP group [IP address] to delete from interface [chars] not found in VRF [chars]

Explanation An inconsistency in maintaining the IGMP cache occurred. The group to be deleted from the interface could not be found in the IGMP cache for the VRF. [IP address] is the IP address in the IGMP group, the first [chars] is the interface, and the second [chars] is the VRF.

Error Message %MROUTE-3-IGMP_TWHEEL_INIT_ERR: Error trying to initialize the IGMP timer wheel

Explanation An error occurred during the initialization of a timer wheel.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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_WAVL_ERROR: IGMP wavl [chars] failed for group
[IP_address] in interface [chars]

Explanation The addition/deletion of igmp group in wavl tree failed.

Recommended Action Collect **show tech ipmulticast** command output. 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 tech-support** 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/cgi-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/launch.do, or contact your Cisco technical support.

Error Message %MROUTE-3-MIDB_QUEUE_ERR: Interface %s not in (%i, %i)

Explanation The MIDB has the highest expiration timer but was not in the MDB->MIDB.

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/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 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/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 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_ZERO: Multicast route count reached zero

Explanation The running count of multicast routes reached zero when it should be non-zero.

Error Message %MROUTE-3-TWHEEL_DELAY_ERR: Exceeded maximum delay (%d ms) requested:
%d

Explanation An attempt was made to schedule a function with a higher delay than the maximum allowed. The function will be scheduled using the maximum delay possible.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 A timer wheel 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 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_INIT_ERR: Trying to re-initialize an already initialized timer wheel

Explanation An error occurred while intializing a timer wheel.

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.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %d

Explanation A timer wheel 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 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_SLOT_ERR: Timer wheel event:%x slot:%d func:%x
unequal to exec slot: %d

Explanation The timer wheel event has an inconsistent slot number.

Recommended Action Enter the **clear ip mroute** command to delete entries from the IP multicast routing table. Copy the message exactly as it appears on the 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 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 (%i,%i)

Explanation The WAVL tree could not be initialized, so the system canot search for Multicast Interface Data Blocks (MIDBs).

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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-4

Error Message %MROUTE-4-INCONSISTENT_IDB_TABLEID: PIM detected inconsistency in table-id information on [chars].

Explanation The PIM has detected that the interface table ID value is not the same as the value maintained by the multicast 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 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-4-MROUTELIMIT: Exceeded multicast limit for group %i, source %i on interface %s

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** command or the **show ip multicast limit** command to learn which multicast interface limit was exceeded.

Error Message %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 With IP multicast enabled, interfaces that transmit traffic from larger to smaller MTU interfaces may not be hardware switched due to fragmentation. A degradation in performance may occur.

Recommended Action Set the MTU values on all interfaces to be identical.

Error Message %MROUTE-4-RADIXDELETE: Error trying to delete multicast route entry
%i/%d for %i (expected %#x, got %#x)

Explanation A route could not be deleted from the routing table.

Recommended Action Enter the clear ip mroute command to delete entries from the IP multicast routing table. Determine whether the router is low on memory. If the problem 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 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-4-RADIXINSERT: Error trying to add multicast route entry %i/%d for %i (expected %x, got %x)

Explanation A route could not be inserted into the routing table.

Recommended Action Enter the clear ip mroute command to delete entries from the IP multicast routing table. Determine whether the router is low on memory. If the problem 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 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-4-REGISTER_SOURCE_CONFIG: Removing pim register source configuration for [chars]

Explanation The register source interface was deleted, or its IP address was removed, or its VRF forwarding was changed.

Recommended Action Check the **ip pim register-source** configuration.

Error Message %MROUTE-4-ROUTELIMIT: Current count of %u exceeds multicast route-limit of %d

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 use the **ip multicast route-limit** command to increase the number of multicast routes. Otherwise, no action is required.

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.

Explanation The number of multicast routes reached the configured percentage of the multicast route-limit.

Recommended Action Increase the multicast route-limit.

Error Message %MROUTE-4-RPF_LOOKUP_LOOP: RPF route lookup loop for %i, route %i/%d

Explanation A routing loop exists, possibly caused by routers reverse path forwarding to different tables .

Recommended Action Check the routing tables used for reverse path forwarding (RPF).

MROUTE-6

Error Message %MROUTE-6-LARGE_TWHEEL_DELAY: Exceeded maximum delay (%d ms)
requested: %d

Explanation An attempt was made to schedule a function with a higher delay than the maximum allowed. The function will be scheduled using the maximum delay possible minus a small delay offset.

Recommended Action Check whether a large IGMP query-interval is set. Some timers may refresh periodically to allow for the large delay.

MSC100_SPA_CC Messages

This section contains Cisco 7304 SPA carrier card messages.

MSC100_SPA_CC-0

Error Message %MSC100_SPA_CC-0-FPGA_BAY_ERROR_EXCEED_LIMIT: [chars] detected
[chars] exceed limit ([dec]) (hardware-status = [hex])

Explanation A critical FPGA error was detected on the SPA or carrier card for the specified subslot. The SPA in this subslot has been disabled.

Recommended Action Try to reactivate the card using the hw-module subslot slot-number/subslot-number start command. If the error persists, enter the show diag slot-number command to gather data that may help identify the cause of the error. If you cannot determine the cause of the error from the error message text or from the show diag slot-number 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/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 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: [chars] Slot [dec]: Hardware error
detected [[chars]]

Explanation A critical FPGA error was detected on the carrier card. The carrier card is deactivated and then an automatic recovery is initiated. If a 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 error message exactly as it appears on the console or in the system log. Enter the show diag slot-number command to gather data that may help identify the cause of the error. If you cannot determine the cause of the error from the error message text or from the show diag slot-number 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/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 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 A critical FPGA error was detected on the carrier card. The carrier card is deactivated and then an automatic recovery is initiated. If a 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 error message exactly as it appears on the console or in the system log. Enter the show diag slot-number command to gather data that may help identify the cause of the error. If you cannot determine the cause of the error from the error message text or from the show diag slot-number 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/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 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-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

This section contains Multicast Source Discovery Protocol (MSDP) messages.

MSDP-3

Error Message %MSDP-3-DNS_ERROR: DNS lookup time out. DNS lookup for ssm mapping will be disabled for 60 sec

Explanation DNS source lookup timeout. DNS server not respond to the DNS query, this may be due to DNS server is down. DNS lookup will be stopped for next 60 sec.

Recommended Action Disbale DNS ssm mapping till the DNS server come up. 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 tech-support** 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/cgi-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/launch.do, or contact your Cisco technical support.

Error Message %MSDP-3-NO_RPF_NODE: SA message could not be sent to peer [IP_address]. Expecting RPF node with host address [IP_address] but found node with host [IP_address] in the rpf tree.

Explanation The reverse path forwarding (RPF) node could not be found while sending a Source-Active (SA) message to the peer. The SA will not be sent in this period.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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.

MSDP-4

Explanation A message larger than the maximum MSDP message size was received. This message could also indicate an internal error.

Recommended Action Obtain the manufacturer and the version information of the router that sent the oversize 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/tac. With 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 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 version commands and your pertinent troubleshooting logs.

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 the MSDP SAs come from legitimate sources or RPs, then enter 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

Error Message %MSDP-5-PEER_IS_SELF: Peering with self (%i)

Explanation Multicast Source Discovery Protocol (MSDP) on this device is peering with itself.

Recommended Action Check the address of the intended MSDP peer.

Error Message %MSDP-5-PEER_UPDOWN: Session to peer %i going %s

Explanation A session to an MSDP peer going up or down.

Recommended Action Determine whether the router is low on memory.

Error Message %MSDP-5-PEER_IS_SELF: Peering with self ([IP_address])

Explanation MSDP peering with ourselves

Recommended Action Check the address of the MSDP peer.

MSPI-1

Error Message %MSPI-1-UNAVAILABLE: MSPI-bad configuration, %s

Explanation A configuration error was detected.

Recommended Action Add or fix the Dial Peer configuration

Error Message %MSPI-1-UNAVAILABLE: 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

Error Message %MSPI-2-UNAVAILABLE: MSPI-Internal software error, cid=%d, %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 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 %MSPI-2-UNAVAILABLE: MSPI-bad context pointer, %s

Explanation A bad context pointer was passed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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

Error Message %MSPI-4-UNAVAILABLE: MSPI- Bad message received: %s

Explanation An unexpected 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/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 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 %MSPI-4-UNAVAILABLE: MSPI- Can't connect to the SMTP server, cid=%d, %s

Explanation No connection was created to the specified SMTP server.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %MSPI-4-UNAVAILABLE: MSPI- Could notsend data to the SMTP server,
cid=%d, %s

Explanation A connection was made to the SMTP server, but no data can be sent.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %MSPI-4-UNAVAILABLE: SMTP- failed %s, %d

Explanation A connection attempt to a remote mail server was not successful. This unexpected behavior.

Recommended Action LOG_STD_NO_ACTION

MSPI-6

Error Message %MSPI-6-UNAVAILABLE: SMTP- opening %s, %d

Explanation A connection attempt ...

Recommended Action LOG_STD_NO_ACTION

MSFC2 Messages

This section contains Multilayer Switch Feature Card 2 (MSFC2) messages.

MSFC2-3

Error Message %MSFC2-3-IDB_INCORRECT_UNTHROTTLE_VECTOR: attempting to throttle idb
[hex] ([chars]) with enable vector [hex]

Explanation An invalid interface enable vector 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 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 was made to send an oversized packet. This message typically appears when the Layer 3 switch is not fragmenting packets with a message size larger than 1500 bytes.

Recommended Action Increase the interface MTU size.

MTRIE Messages

This section contains MTRIE messages.

MTRIE-4

Error Message %MTRIE-4-MTRIECORRUPTLEAF: [IP_address]/[dec] - [chars]

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 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 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 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 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 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

This section contains Mx serial ASIC messages.

MUESLIX-1

Error Message %MUESLIX-1-UNAVAILABLE: %s: %s%s: 0x%08x, 0x%08x

Explanation Pull the info from the port adaptor to show what error caused the STOPFAIL/STARTFAIL problem.

Recommended Action Enable 'debug serial mueslix' debug command. Then collect the 'show tech' and 'show log' information and send them to the technical support representative. After that you can disable the 'debug serial mueslix' command.

Error Message %MUESLIX-1-UNAVAILABLE: %s: Start Failed at %s

Explanation The Mueslix serial interface is not responding to commands used to initialize it.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %MUESLIX-1-UNAVAILABLE: %s: Stop Failed at %s

Explanation The Mueslix serial board failed to respond to a request to disable an 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 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 %MUESLIX-1-UNAVAILABLE: %s:Link is brought %s due to clock rate change,
threshold configured = %u, received clock rate = %u

Explanation The received clock rate is changed from below the threshold configured to above or vice versa..

Recommended Action Check the received clock rate from the provider end, if the clock rate falls below the threshold configured

Error Message %MUESLIX-1-UNAVAILABLE: MUESLIX slot %d: Init Failed at %s

Explanation The Mueslix serial board failed to complete hardware 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 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 %MUESLIX-1-UNAVAILABLE: Mueslix microcode down load failed.

Explanation The Mueslix serial hardware failed. Hardware could not download microcode into mueslix chip.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %MUESLIX-1-UNAVAILABLE: Mx serial (bay %d), Init Failed at %s

Explanation The Mx serial port adaptor failed to complete hardware initialization.

Recommended Action Try to reseat the PA properly in the system slots. If the error still happens, then verify for the hardware failure including the 7200 chasis in case of 7200 or vip in case of 7500 and the PA as this error will come only if there is a failure in hardware.

Error Message %MUESLIX-1-UNAVAILABLE: Mx serial (bay %d): PA down load failed

Explanation The Mx serial hardware failed. It could not download its operational microcode.

Recommended Action Try to reseat the PA properly in the system slots. If the error still happens, then verify for the hardware failure including the 7200 chasis in case of 7200 or vip in case of RSP and the PA as this error will come only if there is a failure in hardware.

Error Message %MUESLIX-1-UNAVAILABLE: Mx serial, %s Start Failed at %s

Explanation A software or hardware error occurred. The Mx microcode is not responding to the enable command used to restart the serial interface

Recommended Action Enable 'debug serial mueslix' debug command. Then collect the 'show tech' and 'show log' information and send them to the DE team or CSE team. After that you can disable the 'debug serial mueslix' command.

Error Message %MUESLIX-1-UNAVAILABLE: Mx serial, %s Stop Failed at %s

Explanation A software or hardware error occurred. The Mx microcode is not responding to the disable command used to stop the serial port.

Recommended Action Enable 'debug serial mueslix' debug command. Then collect the 'show tech' and 'show log' information and send them to the technical support representative. After that you can disable the 'debug serial mueslix' command.

Error Message %MUESLIX-1-UNAVAILABLE: Mx serial: %s TPU halted: cause 0x%2x status 0x%08x shadow 0x%08x

Explanation The Mx serial firmware is not in sync with the driver.

Recommended Action This conditions will clear by itself. Enable 'debug serial mueslix' debug command. Then collect the 'show tech' and 'show log' information and send them to the DE team or CSE team. After that you can disable the 'debug serial mueslix' command.

MUESLIX-3

Error Message %MUESLIX-3-UNAVAILABLE: %d packet buffer, pak=0x%x

Explanation A software or hardware error occurred. The Mx serial driver detected that the transmit ring is in an inconsistent and unrecoverable state.

Recommended Action Enable 'debug serial mueslix' debug command. Then collect the 'show tech' and 'show log' information and send them to the DE team or CSE team. After that you can disable the 'debug serial mueslix' command.

Error Message %MUESLIX-3-UNAVAILABLE: %s

Explanation General error information.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %MUESLIX-3-UNAVAILABLE: Mx serial (bay %d): Device reported %#x

Explanation The system hardware 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 it is not a mueslix based PA, then contact the appropriate component to which that PA belongs. If it is a mueslix based PA, then try to reseat the PA once agian and if the error still comes, then collect the 'show tech' and 'show log' information at the time of this problem and send it to the technical support representative

Error Message %MUESLIX-3-UNAVAILABLE: Mx serial (bay %d): Interface found: %d

Explanation The system couldn't able to recognize all the Mueslix devices that are there on the system

Recommended Action Try to reseat the PA properly in the system slots. If the error is still happening, then verify for the hardware failure including the 7200 chasis in case of 7200 or vip in case of RSP and the PA as this error will come only if there is a failure in hardware.

Error Message %MUESLIX-3-UNAVAILABLE: Unit %d, buffer ownership error, pak = 0x%x

Explanation The Mueslix serial driver detected that the transmit ring is in an inconsistent 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 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.

Recommended Action 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-4

Error Message %MUESLIX-4-UNAVAILABLE: %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.

MVRP Messages

This section contains Multicast VLAN Registration Protocol (MVRP) messages.

MVRP-3

Error Message %MVRP-3-ADD_REGISTRY_FAILED: MVRP subsystem fails to add callback function %s

Explanation Another subsystem has mistakenly added its own callback functions. This message is for debugging purposes.

Recommended Action No action is required.

Error Message %MVRP-3-ENABLE_FAILED: MVRP can't be enabled because %s

Explanation Multicast VLAN Registration Protocol (MVRP) cannot be enabled for the specified reason.

Recommended Action Take action according to the specified reason. For example, if the failure is due to insufficient memory, add more memory to the system.

Error Message %MVRP-3-HA_INIT_FAILED: MVRP High Availability subsystem fails to be initialized and hence MVRP won't support HA stateful switchover.

Explanation The MVRP CF client or the MVRP RF client failed to initialize.

Recommended Action Enter the **show redundancy clients** command and the **show checkpoint clients** command to learn which client was not initialized.

Error Message %MVRP-3-SUBSYS_INIT_FAILED: MVRP subsystem failed in initialization(%s) and MVRP won't function properly.

Explanation MVRP could not initialize, probably due to insufficient memory. Other accompanying system messages may provide further information about the failure.

Recommended Action Enter the **show memory summary** command to check the memory usage. Contact the TAC with the output of the **show memory summary, show version,** and **show run** commands and the associated syslog messages from the time of the problem.

MVRP-6

Error Message %MVRP-6-MODECHANGE: The operating mode is changed to %s mode on interface %s.

Explanation As a result of protocol negotiation, the operating mode changed to the specified mode on the specified interface.

Recommended Action No action is required.

MVRP_CONST Messages

This section contains MVRP messages on Constellation platforms.

MVRP_CONST-3

Error Message %MVRP_CONST-3-MAC_MATCH_REG_FAILED: Unable to reserve needed MAC match
register - cannot run MVRP on interfaces of slot %d

Explanation Multicast VLAN Registration Protocol (MVRP) attempted to reserve a MAC match register for the slot indicated, but there is no dedicated register or programmable register available. MVRP cannot be activated on interfaces of this card.

Recommended Action Disable conflicting protocols that use the MAC match register or use a different card type that supports MVRP.

MVRP_CONST-6

Error Message %MVRP_CONST-6-FEATURE_CONFLICT: Failed to enable MVRP on %s because conflicting feature %s is enabled on the interface

Explanation MVRP could not be enabled on the given interface because of conflicting features. For example, unknown unicast flood blocking(UUFB) and MVRP cannot be enabled on the same interface.

Recommended Action If MVRP is required on the interface, enter the **show running-config interface** command to investigate whether incompatible features are enabled on the interface.

Error Message %MVRP_CONST-6-MAC_LEARNING: MAC learning on VLAN %s is %s

Explanation If only two MVRP ports are forwarding and not pruned in a VLAN, MVRP will disable MAC learning on that VLAN in order to save room in the MAC table, which is a limited system-wide resource.

Recommended Action No action is required.

Error Message %MVRP_CONST-6-MAC_LRN_SETTING_FAILED: Failed to %s MAC learning on VLAN %s

Explanation MVRP failed to enable or disable MAC learning on the given VLAN, probably because MAC learning was already configured on the VLAN by the administrator.

Recommended Action To determine the status of MAC learning on the VLAN, enter the **show** mac-address-table learning command.

MVRP_ISSU Messages

This section contains MVRP in-service software upgrade messages.

MVRP_ISSU-2

Error Message %MVRP_ISSU-2-GET_BUFFER: MVRP ISSU client failed to get buffer for message. Error: %d (%s)

Explanation The Multicast VLAN Registration Protocol (MVRP) ISSU client was unable to reserve buffer space for building a negotiation message. As a result, the negotiation message cannot be sent to the standby device. If a problem occurs with the ISSU session negotiation, the standby device cannot be brought up properly.

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 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, show logging, and show checkpoint client commands and your pertinent troubleshooting logs.

Error Message %MVRP_ISSU-2-INIT: MVRP ISSU client initialization failed to %s.
Error: %d (%s)

Explanation The MVRP ISSU client could not be initialized. This initialization failure must be addressed before an in-service software upgrade or downgrade can be performed. Otherwise, a software upgrade or downgrade will result in downtime.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %MVRP_ISSU-2-SEND_NEGO_FAILED: MVRP ISSU client failed to send
negotiation message. Error: %d (%s)

Explanation The MVRP ISSU client was unable to send a session negotiation message to the peer device. If a problem occurs with the ISSU session negotiation, the standby device cannot be brought up 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/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 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, show logging, and show checkpoint client commands and your pertinent troubleshooting logs.

Error Message %MVRP_ISSU-2-SESSION_NEGO: MVRP ISSU client encountered unexpected
client nego_done. Error: %d (%s)

Explanation The MVRP ISSU client encountered a client negotiation done state that was unexpected. If a problem occurs with the ISSU session negotiation, the standby device cannot be brought up 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/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 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, show logging, show issu session, and show issu negotiated capability commands and your pertinent troubleshooting logs.

Error Message %MVRP_ISSU-2-SESSION_REGISTRY: MVRP ISSU client failed to register
session information. Error: %d (%s)

Explanation The MVRP ISSU client was unable to register session information. If a problem occurs with the ISSU session registration, the standby device cannot be brought up 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/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 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, show logging, show issu capability entries, show issu session, and show issu negotiated capability commands and your pertinent troubleshooting logs.

MVRP_ISSU-3

Error Message %MVRP_ISSU-3-INVALID_SESSION: MVRP ISSU client does not have a valid registered session.

Explanation The Multicast VLAN Registration Protocol (MVRP) ISSU client does not have a valid registered session.

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 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, show logging, show issu capability entries, show issu session, and show issu negotiated capability commands and your pertinent troubleshooting logs.

Error Message %MVRP_ISSU-3-MSG_NOT_OK: MVRP ISSU client 'Message Type %d' is not compatible

Explanation The MVRP ISSU client received an incompatible message from the peer device. The message cannot be processed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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, show logging, show issu message group, show issu session, and show issu negotiated version commands and your pertinent troubleshooting logs.

Error Message %MVRP_ISSU-3-MSG_SIZE: MVRP ISSU client failed to get the MTU for
Message Type %d. Error: %d (%s)

Explanation The MVRP ISSU client was unable to calculate the MTU for the specified message. As a result, the MVRP ISSU client is not able to send the message to the standby 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/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 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, show logging, show issu message group, show issu session, and show issu negotiated version commands and your pertinent troubleshooting logs.

 $\label{lem:continuous} \textbf{Error Message} ~ \text{\$MVRP_ISSU-3-SESSION_UNREGISTRY: MVRP ISSU client failed to unregister session information. Error: $d (%s) \\$

Explanation The MVRP ISSU client was unable to unregister session 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. 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 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, show logging, show issu session, and show issu negotiated capability commands and your pertinent troubleshooting logs.

Error Message %MVRP_ISSU-3-TRANSFORM_FAIL: MVRP ISSU client %s transform failed for
'Message Type %d'. Error: %d (%s)

Explanation The MVRP ISSU client could not transform the specified message type. If the transmit transformation failed, the checkpoint message was not sent to the standby device. If the receive transformation failed, the checkpoint message was not applied on the standby device. In either case, the MVRP state between the active device and the standby device is not identical.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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, show logging, show issu session, and show issu negotiated version commands and your pertinent troubleshooting logs.

MVRP_SWITCH Messages

This section contains MVRP messages on switch platforms.

MVRP_SWITCH-6

Error Message %MVRP_SWITCH-6-IGNORE_USER_CONFIG: The user configured list of pruned VLANs on interface %s is ignored as MVRP will prune VLANs dynamically.

Explanation The **switchport trunk pruning vlan** command is used by VTP pruning to prune VLANs numbered from 1 to 1001 only. This configuration command does not apply to MVRP, which prunes all 4096 VLANs. The command will be ignored.

Recommended Action No action is required.

Error Message %MVRP_SWITCH-6-VLAN_CREATED: MVRP created VLANs %s on this device

Explanation MVRP has created the specified VLANs. MVRP can create VLANs dynamically if the feature is enabled with the **mvrp vlan create** command.

Recommended Action No action is required.

MXT FREEDM-1

Error Message %MXT_FREEDM-1-UNAVAILABLE: 8PRI/4T board slot %d: Firmware download
failed.

Explanation Failed to download firmware into 8PRI/4T board

Recommended Action Power Cycle the 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/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 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 %MXT_FREEDM-1-UNAVAILABLE: 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 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 %MXT_FREEDM-1-UNAVAILABLE: 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. Copy the message exactly as it appears on the 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 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 %MXT_FREEDM-1-UNAVAILABLE: 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 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.

MVR_RP Messages

This section contains Multicast VLAN Registration (MVR) route processor messages.

MVR RP-3

Error Message %MVR_RP-3-OPER_PORT_SET_FAILED: MVR port operational type setting
failed. Reason: [dec]

Explanation A failure occurred while setting the MVR source or receiver port operational type on the switch port. The cause was either a failure on the switch port or an ICC failure.

Recommended Action Unconfigure the MVR type from this switch port and reconfigure it.

MVR_RP-6

Error Message %MVR_RP-6-RCVR_ACCESS_PORTMODECHNG: [chars] MVR type receiver on
[chars], this access port [chars] MVR vlan

Explanation An MVR type receiver should not be configured on a MVR VLAN port. Because this port is configured as dynamic auto/desirable, and due to a mode change in the neighboring switch, the operational switchport mode on this switch has become access and the corresponding VLAN is an MVR VLAN.

Recommended Action Either unconfigure MVR type receiver from this switch port or change the access VLAN to a non-MVR VLAN.

Error Message %MVR_RP-6-RCVR_TRUNK_PORTMODECHNG: [chars] MVR type receiver on
[chars], MVR type receiver should not be configured on trunk ports

Explanation An MVR type receiver should not be configured on a trunk port. Because this port is configured as dynamic auto/desirable, and due to a mode change in the neighboring switch, the operational switch port mode on this switch has become trunk. MVR type receiver should be disabled.

Recommended Action Either unconfigure MVR type receiver from this switch port or change the mode to access and change the VLAN to a non-MVR VLAN.

Error Message %MVR_RP-6-SRC_ACCESS_PORTMODECHNG: [chars] MVR type source on [chars],
this access port [chars] MVR vlan

Explanation MVR type source should not be configured on a non-MVR VLAN port. Because this port is configured as dynamic auto/desirable, and due to mode change in the neighboring switch, the operational switch port mode on this switch has become access and the corresponding VLAN is non-MVR.

Recommended Action Either unconfigure MVR type source from this switch port or change the access VLAN to an MVR VLAN.

Error Message %MVR_RP-6-SRC_TRUNK_PORTMODECHNG: [chars] MVR type source on [chars],
this trunk port allowed vlans [chars] MVR vlan

Explanation MVR type source should not be configured on a non-MVR VLAN port. Because this port is configured as dynamic auto/desirable, and due to mode change in the neighboring switch, the operational switch port mode on this switch has become trunk and the corresponding VLAN range does not contain the MVR VLAN.

Recommended Action Either unconfigure MVR type source from this switch port or change the trunk allowed VLAN range to include the MVR VLAN.

MWAM Messages

This section contains Multiprocessor WAN Application Module (MWAM) messages.

Error Message %MWAM-4-FAILED_FILE_SYNC: Failure creating or synchronizing MWAM configuration file to standby: [chars], [chars]

Explanation The active supervisor engine has failed to copy an MWAM configuration file from bootflash: to slavebootflash:. The standby supervisor engine will not be up to date with the MWAM configuration files if a switchover occurs.

Recommended Action Verify that there is space available on the bootflash: and slavebootflash: devices. It may be necessary to compress either or both devices to recover space used by deleted or overwritten files. After taking these actions, a new attempt to synchronize files can be started either by resetting the standby supervisor engine or by configuring **no mwam bootflash access** followed immediately by **mwam bootflash access**. If these actions do not resolve the issue, obtain the output from the following commands:

- dir bootflash:
- dir slavebootflash:
- show bootflash:
- show slavebootflash:

If possible, set **debug mwam all** on the active supervisor engine, and then reset the standby supervisor engine with the **hw-module module** *slot* **reset** command, capturing the debug information that appears on the active supervisor engine 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 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 %MWAM-4-FAILED_TASK_INIT: Failed to start a required task: [chars],
[chars]

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 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.

NATMIB_HELPER Messages

This section contains Network Address Translator (NAT) MIB helper messages.

NATMIB_HELPER-3

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 caused 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

This section contains network-based application recognition (NBAR) messages.

NBAR-1

 $\pmb{\mathsf{Error}}\, \pmb{\mathsf{Message}}\,$ %NBAR-1-UNAVAILABLE: Nodes size mismatch between parsing and sending:%s

Explanation Failure during the distribution of NBAR graph nodes from the route processor to the linecards. Failure is related to node size changes between parsing and sending phase

Recommended Action Disable nbar protocols

 $\textbf{Error Message} \ \ \text{\$NBAR-1-UNAVAILABLE:} \ \ \text{Reached maximum amount of memory allocated for stile}$

Explanation This platform allows NBAR to use a limited amount of memory for classification and that amount has been used up because of high traffic conditions.

Recommended Action Increase amount of memory in router.

Error Message %NBAR-1-UNAVAILABLE: link-next not NULL when allocated. link-next = %s

Explanation An attempt was made to get a link from the free bucket which is pointing to another resource. Links within the free bucket should be NULL, therefore this link is corrupted and should not be used

Recommended Action Configure the router with the **ip nbar resources** to allocate a larger initial pool of resources.

Error Message %NBAR-1-UNAVAILABLE: link-prev not NULL when allocated. link-prev = %s

Explanation An attempt was made to get a link from the free bucket which is pointing to another resource. Links within the free bucket should be NULL, therefore this link is corrupted and should not be used

Recommended Action Configure the router with the **ip nbar resources** to allocate a larger initial pool of resources.

NBAR-2

Error Message %NBAR-2-UNAVAILABLE: Failure in the heuristic subsystem of NBAR: %s

Explanation Failure during the distribution of NBAR heuristic data structures from the route processor to the linecards.

Recommended Action Disable heuristic protocols

Error Message %NBAR-2-UNAVAILABLE: 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-UNAVAILABLE: 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-UNAVAILABLE: 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-2-UNAVAILABLE: 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.

NETCONF Messages

This section contains network configuration protocol (NETCONF) messages.

NETCONF-3

Error Message %NETCONF-3-MEMORY: %s

Explanation The network configuration protocol (NETCONF) subsystem was unable to reserve the required memory to complete this operation.

Recommended Action Check the system memory for memory allocation errors. Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

NETWORK_CLOCK_SYNCHRONIZATION

Error Message %NETWORK_CLOCK_SYNCHRONIZATION-4-UNAVAILABLE: 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-4-UNAVAILABLE: Network clock source initialised to local oscillator.

Explanation Warning indicates that network clock used will be internal.

Recommended Action No action is required.

Error Message %NETWORK_CLOCK_SYNCHRONIZATION-4-UNAVAILABLE: 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.

NETFLOW_AGGREGATION Messages

This section contains NetFlow Aggregation (NETFLOW_AGGREGATION) messages.

NETFLOW_AGGREGATION-3

Error Message %NETFLOW_AGGREGATION-3-FLOWMASK_CONFLICT: Netflow [chars] cannot set
the required flowmask

Explanation The NetFlow aggregation flow mask conflicts with other features.

Recommended Action If NetFlow Data Export is configured, increase the size of the NDE flow mask to VLAN full flow by entering the mls flow ip interface-full command, and then reconfigure the NetFlow aggregation scheme. 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 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.

NETFLOW AGGREGATION-4

Error Message %NETFLOW_AGGREGATION-4-NO_TOS_AGGR: Disable hardware switching to
enable [chars]

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 An error occurred in receiving an Optimized Edge Routing (OER) aggregation export packet.

Recommended Action Disable OER monitor prefix aggregation.

NETFLOW_AGGREGATION-6

Error Message %NETFLOW_AGGREGATION-6-OER_MLS_LONG_AGING: MLS long aging time modified by OER to [dec]

Explanation OER modified the long aging time to a value that may be different from the configured value

Recommended Action No action is required.

NETWORK_PORT_SATELLITE Messages

This section contains network port satellite messages.

NETWORK PORT SATELLITE-3

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 reenable the interface, enter the **shutdown** command, followed by the **no shutdown** command in interface configuration mode, to shut down and restart the interface.

NETWORK_PORT_SATELLITE-6

Error Message %NETWORK_PORT_SATELLITE-6-UNAVAILABLE: Transmit lock up is detected in %s. This port is adminstratively down.

Explanation When the PHY is powered on and off, the MAC cycles from Gigabit to 100, and the port might lock up and stop sending packets. The PHY refers to the physical layer device on the switch, which sends and receives optical signals and provides framing and line integrity.

Recommended Action Shut down the port by using the shutdown interface configuration command, and bring it back up by using the no shutdown interface configuration command

NETWORK_RF_API Messages

This section contains network redundancy feature API (NETWORK_RF_API) messages.

NETWORK RF API-3

Error Message %NETWORK_RF_API-3-CLIENT_REGISTER_FAIL: Failed to register with
[chars], rc =[dec]

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 [chars], descriptor type=[dec]

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, if it is a nonzero value, 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.

Error Message %NETWORK_RF_API-3-FAILDECODEDATADESCINSTDBY: Cannot decode data
descriptor in Standby for [chars], descriptor type=[dec]

Explanation An internal data descriptor could not be decoded in the standby unit. The message identifies the interface or controller that caused the decoding failure in the standby unit. This interface was encoded in the active unit but could not be decoded in the standby unit. The failure is probably caused by a 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 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-FAILENCODEDATADESC: Cannot encode data descriptor
for [chars], descriptor type=[dec]

Explanation An internal data descriptor could not be encoded 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 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.

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 cause 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 Copy the message exactly as it appears on the 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 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-FAILSENDMSGTOSTDBY: Failed to send [chars] message
to standby for [chars], rc=[dec]

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.

Error Message %NETWORK_RF_API-3-INVALID_CHKPT_STATUS_CODE: Invalid checkpointing
status code received, rc=[dec]

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 [chars] 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.

Error Message %NETWORK_RF_API-3-IPC: [chars] [chars]

Explanation An interprocess communication (IPC) error has occurred. Additional details on the cause of the error are specified in the message text on the console or in the system log.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show tech-support ipc command to gather data that may help identify the cause 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/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-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 cause 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.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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.

 $\textbf{Error Message} \ \text{\%NETWORK_RF_API-3-ISSU_MSG_TYPE_INCOMPAT:} \ \text{The active and standby ISSU message types are incompatible}$

Explanation An incompatible message was used for state synchronization. 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. 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 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-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 cause 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.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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-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 cause 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.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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-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 cause 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.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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-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 cause 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 Copy the message exactly as it appears on the 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 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_CHKPT_BUFFER: No checkpointing buffer for
[chars], rc=[dec]

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.

Error Message %NETWORK_RF_API-3-NO_MSG_BUFFER: No message buffer for [chars]

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: [chars]

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 cause 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.

NET SERV-4

Error Message %NET_SERV-4-UNAVAILABLE: Unexpected condition: %s

Explanation An unexpected condition was detected while performing a services timer 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/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 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 %NET_SERV-4-UNAVAILABLE: Unexpected error: %s

Explanation An unexpected error occurred while performing a services timer operation

NETWORK RF API-6

Error Message %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 may experience a temporary loss of traffic.

Recommended Action No action is required.

NHRP Messages

This section contains Next Hop Resolution Protocol (NHRP) messages.

```
Error Message %NHRP-3-TIMERLOOP: Timer process looping
([dec]/[dec]/[dec]/[dec]).
```

Explanation The process that handles timer events is looping, possibly on a malfunctioning 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 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.

NIM-2

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 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 %NIM-2-UNAVAILABLE: Attempted to manipulate uninitialized ichainQ in
%s

Explanation A software or hardware 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 %NIM-2-UNAVAILABLE: 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-UNAVAILABLE: Illegal reference to non-existent slot %d

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 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.

Explanation An internal software 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 %NIM-2-UNAVAILABLE: Unsupported %s NIM in slot %d

Explanation The indicated NIM is not supported on this platform.

Recommended Action Remove the NIM.

Error Message %NIM-2-UNAVAILABLE: 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.

Recommended Action

NP Messages

This section contains Network Processor messages.

NP-2

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.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

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.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

Error Message NP-2-INVALID: Corrupted microcode retrieved from the image bundle for NP [dec].

Explanation The retrieved microcode appears to be corrupted.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

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.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

Error Message %NP-2-RESTARTED: NP [dec] restarted.

Explanation Network Processor has been restarted, either manually or by a microcode reload, or as a result of an exception.

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 tech-support**

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/cgi-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/launch.do, or contact your Cisco technical support.

Error Message 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.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

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.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

NP-3

Error Message %NP-3-UNAVAILABLE: %s queue is full for Slot %d, DFC %d, Module %d.

Explanation TX queue is full for this 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/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 %NP-3-UNAVAILABLE: 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 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 %NP-3-UNAVAILABLE: 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 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 %NP-3-UNAVAILABLE: Message Id %x not supported.

Explanation The Nextport does not supported this control message id.

Error Message %NP-3-UNAVAILABLE: 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-UNAVAILABLE: Slot %d, DFC %d, Module %d not exist.

Explanation No Virtual Console opens for this module.

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

NP-5

Error Message %NP-5-RESTARTEDALL: All NPs have been restarted.

Explanation All Network Processors have been restarted, either manually or by a microcode reload, or as a result of an exception.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

NP_BS-2

Error Message %NP_BS-2-UNAVAILABLE: DFC in slot %d does not have three NP108s!

Explanation DFC does not have three NP108s which is an illegal configuration

Error Message %NP_BS-3-UNAVAILABLE: %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 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 %NP_BS-3-UNAVAILABLE: %s

Explanation NextPort BootStrap and Crash Monitor Could not allocate memory for internal module database

 $\textbf{Recommended Action } LOG_STD_NO_ACTION$

Error Message %NP_BS-3-UNAVAILABLE: %s nonexisting NP module %d/%d/%d

Explanation NextPort BootStrap and Crash Monitor detected an internal database error

Recommended Action LOG_STD_NO_ACTION

Explanation NextPort BootStrap and Crash Monitor failed to access crash information

Recommended Action LOG STD NO ACTION

Error Message %NP_BS-3-UNAVAILABLE: Invalid NextPort Firmware for %d/%d/%d

Explanation NextPort BootStrap and Crash Monitor detected aninvalid NextPort firmware

Error Message %NP_BS-3-UNAVAILABLE: 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 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 %NP_BS-3-UNAVAILABLE: 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 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 %NP_BS-3-UNAVAILABLE: NextPort Module %d/%d/%d detected a module POST failure 0x%x

Explanation NextPort BootStrap and Crash Monitor detected and module POST failure

Error Message %NP BS-3-UNAVAILABLE: 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 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 %NP_BS-3-UNAVAILABLE: NextPort Module %d/%d/%d failed firmware image
validation

Explanation NextPort BootStrap and Crash Monitor detected ana failed NextPort firmware CRC validation

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %NP_BS-3-UNAVAILABLE: NextPort Module %d/%d/%d memory test failed

Explanation NextPort BootStrap and Crash Monitor detected a failedNextPort module memory test

Error Message %NP_BS-3-UNAVAILABLE: NextPort module d/d/d failed to respond to keepalive message

Explanation NextPort BootStrap and Crash Monitor detected a module failed to respond to keepalive message

 $\label{local_commended} \textbf{Recommended Action} \quad LOG_STD_NO_ACTION.$

NP_BS-6

Error Message %NP_BS-6-UNAVAILABLE: NextPort module %d/%d/%d Started - %d.%d.%d.%d

Explanation NextPort BootStrap and Crash Monitor successfully started module

Recommended Action LOG STD NO ACTION

Error Message %NP_BS-6-UNAVAILABLE: NextPort module %d/%d/%d Stopped

Explanation NextPort BootStrap and Crash Monitor stopped module

 $\textbf{Recommended Action} \quad LOG_STD_NO_ACTION$

NP_CLIENT Messages

This section contains NextPort (NP) client messages.

NP CLIENT-2

Error Message %NP_CLIENT-2-UNAVAILABLE: 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.

NP CLIENT-3

Error Message %NP_CLIENT-3-ALLEXISTS: NP Client Previously Defined Software Element
- [chars]: [chars] [chars]

Explanation The NP client has detected a previously defined software element.

Recommended Action Attempt to reload the Cisco IOS 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. 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 %NP_CLIENT-2-FATAL: NP Client [chars] : [chars] ([dec], [dec])
```

Explanation The NP client software detected a critical programming 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 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 %NP_CLIENT-3-INITFAIL: NP Client Initialization Failed - [chars]:
[chars] [chars]
```

Explanation The NP client could not initialize memory needed to service one or more network processors. This error may indicate that an incompatibility exists between the NP firmware and the associated Cisco IOS image.

Recommended Action Attempt to reload the Cisco IOS 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. 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 %NP_CLIENT-3-INTF: [chars] ([chars]) on [chars] - [chars]
if_number=[dec]
```

Explanation The interface NP client detected an 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 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 %NP_CLIENT-3-MAXEXCEED: NP Client Max Services Exceeded - [chars]:
[chars] [chars]
```

Explanation The maximum number of NP client services has been exceeded.

Recommended Action Change the configuration to reduce the number of services configured. 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. 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 %NP_CLIENT-3-METADATA: [chars] failed: [chars] [[chars]] [chars]
```

Explanation Processing of the metadata for the specified network processor has failed. The specified network processor will fail to operate.

Recommended Action Attempt to reload the network processor microcode. 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. 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 %NP_CLIENT-3-NOMEM: Memory Allocation Failure - [chars]: [chars]
[chars]
```

Explanation The NP client could not allocate the 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 by the configuration. Try to reload the Cisco IOS 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. 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 %NP_CLIENT-3-NOTFOUND: NP Client Software Element Not Found - [chars]:
[chars] [chars]

Explanation The NP client could not locate a required software element.

Recommended Action Attempt to reload the Cisco IOS 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. 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 %NP_CLIENT-3-NOTSUP: NP Client Feature Not Supported - [chars]:
[chars] [chars]
```

Explanation The NP client does not support the specified feature.

Recommended Action Verify that the correct Cisco IOS image is loaded on the affected card or platform for the configured features. 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. 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 %NP_CLIENT-3-NPUNKNOWN: NP Client Unsupported NP - [chars]: [chars]
[chars]

Explanation The NP client detected an unsupported NP.

Recommended Action Verify that the correct Cisco IOS image is loaded on the affected card or platform for the configured features. 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. 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_EST-3

Error Message %NP_EST-3-UNAVAILABLE: %s

Explanation EST detected an internal error

Recommended Action LOG_STD_NO_ACTION

NP EST-6

Error Message %NP_EST-6-UNAVAILABLE: %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 LOG_STD_NO_ACTION

Error Message %NP_EST-6-UNAVAILABLE: %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 LOG_STD_NO_ACTION

Error Message %NP_EST-6-UNAVAILABLE: %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 LOG_STD_NO_ACTION

NP MD-0

Error Message %NP_MD-0-UNAVAILABLE: 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 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 $NP_MD-0-UNAVAILABLE$: Attempt to %s a data channel on the unexisting modem d/d

Explanation An internal software error occurred that probably resulted in corrupted modern 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 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 %NP_MD-0-UNAVAILABLE: 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 Show mem. Copy the message exactly as it appears on the 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 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-0-UNAVAILABLE: 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 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 %NP_MD-0-UNAVAILABLE: 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 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 $NP_MD-0-UNAVAILABLE$: Cannot bring up the module d/d/d 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

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %NP_MD-0-UNAVAILABLE: 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 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 %NP_MD-0-UNAVAILABLE: Slot %d is not present in the system

Explanation An internal software error occurred, 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 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 %NP_MD-0-UNAVAILABLE: TTY %s: Cannot allocate %s

Explanation An important buffer cannot be allocated due to the shortage of packet memory.

NP MD-1

Error Message %NP_MD-1-UNAVAILABLE: 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 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_MD-3

Error Message %NP_MD-3-UNAVAILABLE: %s is NULL in %s for port %d

Explanation Unexpected NULL pointer at specified 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 %NP_MD-3-UNAVAILABLE: 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

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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-UNAVAILABLE: 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 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 %NP_MD-3-UNAVAILABLE: Could not send to data queue for port %d,
inflight tx buffers %d

Explanation NextPort Modem Driver could not send buffer to Interface 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/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 %NP_MD-3-UNAVAILABLE: Failed to return data buffer for port %d

Explanation Call to NextPort Interface Driver to replenish data buffer for this channel failed

Error Message %NP MD-3-UNAVAILABLE: Failed to send inband message for TTY %s

Explanation Call to send inband message on data queue 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 %NP_MD-3-UNAVAILABLE: 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 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 %NP_MD-3-UNAVAILABLE: 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

Error Message %NP MD-3-UNAVAILABLE: 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 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.

 ${\bf Error\ Message}\ %{\tt NP_MD-3-UNAVAILABLE}\colon \tt TTY\ %s\colon No\ buffers\ available\ to\ set\ up\ the\ transmit\ queue$

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 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 %NP_MD-3-UNAVAILABLE: TTY %s: RTS is incorrectly deasserted; reasserting now

Explanation A software error occurred resulting in an invalid state for the RTS modem signal

Error Message %NP_MD-3-UNAVAILABLE: 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 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 %NP_MD-3-UNAVAILABLE: 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 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 %NP_MD-3-UNAVAILABLE: 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-6

Error Message %NP_MD-6-UNAVAILABLE: NextPort module %d/%d/%d down

Explanation NextPort Modem Driver detected a module going down

Recommended Action LOG STD NO ACTION

Error Message %NP_MD-6-UNAVAILABLE: NextPort module %d/%d/%d up

Explanation NextPort Modem Driver detected a module coming up

Recommended Action LOG_STD_NO_ACTION

Error Message %NP MD-6-UNAVAILABLE: 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 LOG_STD_NO_ACTION

Error Message %NP_MD-6-UNAVAILABLE: Slot %d removed

Explanation Slot has been removed from the system

Recommended Action LOG_STD_NO_ACTION

NP MM-3

Error Message %NP_MM-3-UNAVAILABLE: Failed to allocate control message buffer for NP module %d/%d/%d - %s

Explanation NextPort Module Manager failed to allocate control message buffer

Error Message %NP MM-3-UNAVAILABLE: Failed to create Data Q for NP module %d/%d/%d

Explanation NextPort Module Manager failed to create Data 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.

Error Message %NP_MM-3-UNAVAILABLE: Failed to send %s message to NP module %d/%d/%d

Explanation NextPort Module Manager failed to send control 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 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 %NP_MM-3-UNAVAILABLE: Invalid NP module state(%s) %d/%d/%d - %s

Explanation NextPort Module Manager detected invalid NP module state

Error Message %NP_MM-3-UNAVAILABLE: Invalid NP_ADDRESS %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 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 %NP_MM-3-UNAVAILABLE: Module Crash detected %d/%d/%d: state = %d,
cause code = %d

Explanation NextPort Module Manager detected a crashed 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/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 %NP_MM-3-UNAVAILABLE: Module Run Time Error %d/%d/%d : recovery = 0x%x, error = 0x%x

Explanation NextPort Module Manager received a module run time error

Error Message %NP_MM-3-UNAVAILABLE: 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 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 %NP_MM-3-UNAVAILABLE: 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 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 %NP_MM-3-UNAVAILABLE: 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

Error Message %NP_MM-3-UNAVAILABLE: 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

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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_SIGLIB-3

Explanation Formatting of the call processing tone message to the nextport module 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.

NP_SPE_DS-3

Error Message %NP_SPE_DS-3-UNAVAILABLE: %s

Explanation SPE download code failed to initialise - SPE download will fail

Recommended Action LOG STD NO ACTION

Error Message %NP_SPE_DS-3-UNAVAILABLE: 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 Show mem. Copy the message exactly as it appears on the 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 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-UNAVAILABLE: SPE %d/%d/%d/%d: %s

Explanation SPE download code failed - download aborted

Recommended Action LOG_STD_NO_ACTION.

NP SSM-0

Error Message %NP_SSM-0-UNAVAILABLE: 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 Show mem. Copy the message exactly as it appears on the 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 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_SSM-3*NP_SSM-3-UNAVAILABLE: 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 LOG_STD_NO_ACTION

Error Message $NP_SSM-3-UNAVAILABLE: SSM(%d/%d): Session Runtime Error Code = %d, Recovery Action = %d$

Explanation Session and Service Manager Received a Runtime Error for the slot and port

Recommended Action LOG_STD_NO_ACTION

Error Message %NP_SSM-3-UNAVAILABLE: SSM: Invalid Session/Service Message, ID = 0x%x

Explanation Session and Service Manager Received an invalid message from the NextPort Message Dispatcher

Recommended Action LOG_STD_NO_ACTION.

NP_SSM-6

Error Message %NP_SSM-6-UNAVAILABLE: 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 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 %NP_SSM-6-UNAVAILABLE: 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 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-CRASHINFO Messages

This section contains Network Processor messages.

Error Message %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.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

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.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

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.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

NP-DEV Messages

This section contains Network Processor messages.

NP_DEV-2

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.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

Error Message %NP_DEV-2-WATCHDOG: Watchdog detected on NP [dec]

Explanation A software exception occurred on an NP device.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

NP_DEV-3

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 A double-bit ECC error was detected for a Network Processor device component.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

Error Message %NP_DEV-3-ERRINTR: Error caused by: [chars] on NP [dec]

Explanation An error in Network Processor device operation was detected.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

Error Message %NP_DEV-3-PERR: 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 was detected for a Network Processor device component.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

NP_DEV-5

Error Message %NP_DEV-5-INTRTHR: Interrupt: cause [dec] for NP([int]) throttled

Explanation Too many interrupts are being generated from Network Processor device.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

NP_DEV-6

Error Message %NP_DEV-6-PERR_RECOVERED: Recovered from a Parity error on NP [dec],
cause [dec], count [int] uqParityMask [hex], uqSRAMLine [hex], bRecov [dec], bRewr
[dec] Total [dec]

Explanation Recovered from a Parity error detected for a Network Processor device component.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

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.

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 tech-support** 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/cgi-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/launch.do, or contact your Cisco technical support.

NSE100 Messages

This section contains network services engine messages.

NSE100-3

Error Message %NSE100-3-IOBUSTIMEOUT: IO access to the address [hex] timed out
(Target: [chars])

Explanation The system controller flagged an I/O access timeout, indicating either a transient/fatal system component issue or an underlying software initialization issue. The source of the problem can be determined more accurately by decoding the address 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 while, the problem is probably hardware related. If this problem is seen repeatedly, the corresponding component might need to be replaced.

Recommended Action If the message is seen repeatedly, copy the message exactly as it appears on the 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 you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: description of the user activity just before the occurrence of this incident, prevailing system operational conditions like traffic pattern, amount of traffic, system neighbors, system console messages and the output of the following commands: show running-config, show c7300 pxf accounting, show c7300 pxf interfaces all, show diag and show c7300.

Error Message %NSE100-3-PINNACLE_PORT: [chars] - [chars]

Explanation A failure occurred while one of the Gigabit Ethernet (GE) ports on the NSE-100 was being initialized. This condition is probably caused by either 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, copy the message exactly as it appears on the 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 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.
- The prevailing system operational conditions such as the traffic patterns, amount of traffic, and system neighbors.
- Any additional system console messages.
- 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.

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 timer.

Recommended Action If the message is seen repeatedly, copy the message exactly as it appears on the 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 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.
- The prevailing system operational conditions such as the traffic patterns, amount of traffic, and system neighbors.
- Any additional system console messages.
- The output of the following commands: show version, show running-config, show platform, show controller gigabitEthernet, show interface gigabitEthernet, show pxf accounting, show c7300, show logging and show tech-support.

Error Message %NSE100-3-VA_ERROR: Vanallen ASIC detected an error condition: [chars]

Explanation The Van Allen ASIC has detected an error condition. Either a hardware error or an error in the packet 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 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.

NSE100-4

Error Message %NSE100-4-UNAVAILABLE: CI-DEMUX FPGA detected an error (Status 0x%08x)

Explanation The Cluster Internnect DEMUX FPGA found an error with the egress packet. Type of error is indicated in the status. The message is informational.

Recommended Action If the mesage is seen repeatedly, please collect following information and contact Cisco technical support representative. Output of the commands, show c7300 pxf accounting, show c7300 pxf interfaces all, show diag, show c7300

Error Message %NSE100-4-UNAVAILABLE: ROM monitor upgrade in ROM %d terminated.

Explanation ROM monitor upgrade process was terminated by the user. The user had terminated the IOS boot up process from a first-time image in the writable ROM. This causes the verification process of this new ROM monitor to fail. This automatically sets the ROM monitor image to be INVALID.

Recommended Action After downloading a new ROM monitor image to the writeable ROM, you must reload IOS for the new ROM monitor image to take effect. The first time a new ROM monitor image is loaded, you must allow the system to boot up IOS before doing any resets or power cycling. If the ROM monitor loading process is interrupted, the system interprets this as a boot up failure of the new ROM monitor image. Please re-download the ROM monitor image to the writable ROM and start the ROM monitor upgrade process again. If the problem persists, please issue the **show tech-support** command to gather more information and call your Cisco technical support representative and provide the representative with the gathered information.

 $\textbf{Error Message} \ \texttt{\%NSE100-4-UNAVAILABLE:} \ \textbf{System hardware configuration \$scompliant with recommended guidelines.}$

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-UNAVAILABLE: The aggregate throughput of the Line Cards changed from %d kbps (*scompliant) to %d kbps (*scompliant)

Explanation The aggregate throughput of the line cards in the system changed to make the system compliant or non-compliant 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-UNAVAILABLE: Unknown GBIC type or GBIC not inserted properly
for interface GigabitEthernet%d/%d

Explanation Sometimes if GBIC is not inserted all the way into its slot, the GBIC type may return as Unknown Media Type

Recommended Action Take out the GBIC and reinsert all the way in

NSE100-5

Error Message %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 why 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.

NSE100-5

Error Message %NSE100-6-UNAVAILABLE: ROM monitor upgrade in ROM %d successful.

Explanation ROM monitor upgrade has successfully performed.

Recommended Action LOG_STD_NO_ACTION

NSP-2

Error Message %NSP-2-UNAVAILABLE: 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.

NSP-3

Error Message %NSP-3-UNAVAILABLE: Bogus parameter passed: %s %d

Explanation Internal error: parameter pased to routine is invalid

Error Message %NSP-3-UNAVAILABLE: 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-4

Error Message %NSP-4-UNAVAILABLE: %s: %s %s

Explanation A SONET line warning condition has been detected LOG_STD_NO_ACTION.

NSPINT-3

Error Message %NSPINT-3-UNAVAILABLE: no handler for index %d

Explanation Internal error: an interrupt has been detected for which no handler has been registered.

NSPINT-5

Error Message %NSPINT-5-UNAVAILABLE: 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.

NSP_APS-4

Error Message %NSP_APS-4-UNAVAILABLE: 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 LOG_STD_NO_ACTION

NSP_OIR-3

Error Message %NSP_OIR-3-UNAVAILABLE: 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-UNAVAILABLE: Cannot enable half height card, redundancy
conflict

Explanation Redundancy/Card conflict with cards in adjacent slot.

Recommended Action LOG_STD_NO_ACTION

Error Message %NSP_OIR-3-UNAVAILABLE: 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-UNAVAILABLE: 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 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_OIR-3-UNAVAILABLE: 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-UNAVAILABLE: 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.

Error Message %NSP_OIR-3-UNAVAILABLE: 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 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. 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-UNAVAILABLE: Unrecognized Card, Driver for Card not available in system software, ignoring card type 0x%x

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 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_OIR-4

Error Message %NSP_OIR-4-UNAVAILABLE: 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

Error Message %NSP_OIR-4-UNAVAILABLE: Redundancy submode not present!

Explanation System config does not have Redundancy submode

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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_OIR_6

```
Error Message %NSP_OIR-6-UNAVAILABLE: Card %s inserted into slot: %d

Explanation Full card inserted into slot

Recommended Action LOG_STD_NO_ACTION

Error Message %NSP_OIR-6-UNAVAILABLE: Card %s inserted into subslot: %d/%d

Explanation Half height card inserted into subslot

Recommended Action LOG_STD_NO_ACTION

Error Message %NSP_OIR-6-UNAVAILABLE: Card %s removed from slot: %d

Explanation Full card removed from slot

Recommended Action LOG_STD_NO_ACTION

Error Message %NSP_OIR-6-UNAVAILABLE: Card %s removed from subslot: %d/%d

Explanation Half height card removed from subslot

Recommended Action LOG_STD_NO_ACTION

Error Message %NSP_OIR-6-UNAVAILABLE: Card %s, slot: %d, being brought online

Explanation Full card being brought online
```

Recommended Action LOG_STD_NO_ACTION

Error Message %NSP_OIR-6-UNAVAILABLE: Card %s, subslot: %d/%d, being brought online

Explanation Half Height card being brought online

Recommended Action LOG_STD_NO_ACTION

NP_UCODE Messages

This section contains NextPort (NP) microcode messages.

Error Message %NP_UCODE-3-INVALID_FILE: NP microcode [chars] for device [chars] is
invalid ([chars])

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.

NRP-3

Error Message %NRP-3-UNAVAILABLE: %s %s

Explanation An Interprocess Communication (IPC) error occurred. The details about what was attempted and what went wrong will be printed.

NSE-3

Error Message %NSE-3-UNAVAILABLE: 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. This condition will result in PXF exceptions being made and will eventually result in the PXF being disabled. The base address has not been updated.

Recommended Action Make a change in the access list that will force a reevaluation of the ACL data.

Error Message %NSE-3-UNAVAILABLE: 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-UNAVAILABLE: Unknown QoS action type: 0x%x.

Explanation A QoS feature, unrecognised by PXF, has been configured with the Modular QoS CLI. The feature will work but excessive punting may occur if the feature is on an output interface

Recommended Action If performance is poor, try disabling PXF.

NSE-6

Error Message %NSE-6-UNAVAILABLE: No VLAN statistics are avaliable for PXF switched interface %s.

Explanation No 802.1Q statistics are avaliable for packets that are PXF switched

Recommended Action No action is required.

NTI Messages

This section contains Negotiation Trigger Infrastructure (NTI) messages.

NTI-3

Error Message %NTI-3-AGENT_ERR: %s Notifying platform about AGENT ERROR %s, AGENT EP ID 0x%x for EP ID 0x%x, EP type %s, EP group %s

Explanation A Negotiation Trigger Infrastructure (NTI) AGENT 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 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 %NTI-3-CLIENT_NOT_REGSTRD_FOR_EPTYPE: %s Client (#%d - %s) has NOT
registered for platform EP type %s

Explanation A client has not registered for a platform endpoint (EP) type.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %NTI-3-ISSU_AGENT_LIST_ALLOC: Failed to allocate agent bitlist for endpoint 0x%x

Explanation The NTI ISSU process was unable to allocate the agent bitlist for an endpoint. The endpoint will probably be reset.

Error Message %NTI-3-ISSU_DUMMY_MSG_FAILED: Failed to send a dummy nego msg to endpoint 0x%x

Explanation The NTI ISSU process was unable to send a dummy negotiation message to trigger negotiation on the peer. The endpoint will probably be 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/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 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 %NTI-3-ISSU_EXISTING_SESSION: Session already exists for ep 0x%x

Explanation The NTI ISSU session already exists for this endpoint. The endpoint will probably be 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/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 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 %NTI-3-ISSU_INVALID_MEDMAN: Invalid MEDMan data

Explanation The Multiple Endpoint Data Manager (MEDMan) data is invalid. The endpoint will probably be reset.

Error Message %NTI-3-ISSU_INVALID_MSG_TRANS: NTI ISSU transformation function got an invalid message in argument

Explanation The NTI ISSU process transformation function received an invalid message. The message cannot be transformed and will not be processed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %NTI-3-ISSU_INVALID_RC: Invalid ISSU rc argument for endpoint 0x%x

Explanation The NTI ISSU process received an invalid ISSU return code argument. ISSU negotiation will fail and the endpoint will probably be 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/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 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.

 $\textbf{Error Message} ~ \$ \texttt{NTI-3-ISSU_INVALID_RCVD_MSG: NTI ISSU received an invalid message for transformation from endpoint $0x\$x $$

Explanation The NTI ISSU process received an invalid message for transformation. The message cannot be processed.

Error Message %NTI-3-ISSU_INVALID_SESSION: Invalid session for ep 0x%x

Explanation The NTI ISSU session is invalid for the endpoint. The endpoint will probably be 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/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 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 %NTI-3-ISSU_MEDMAN_CREATE: Failed to create MEDMan data for endpoint 0x%x

Explanation The NTI ISSU process was unable to create the Multiple Endpoint Data Manager (MEDMan) data for an endpoint. Negotiation cannot be done, and the endpoint will probably be 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/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 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 %NTI-3-ISSU_MEDMAN_GET: Failed to get MEDMan data for endpoint 0x%x
(%s)

Explanation The NTI ISSU process was unable to retrieve MEDMan data for an endpoint. ISSU negotiation will fail for this endpoint, and the endpoint will probably be reset.

Error Message %NTI-3-ISSU_MTU_FAILED: NTI ISSU failed to get MTU for message type %d
(%s)

Explanation The NTI ISSU process was unable to get the message MTU for transformation. The message cannot be sent.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %NTI-3-ISSU_NEGO_ALREADY_STARTED: NTI ISSU negotiation already
started, endpoint 0x%x

Explanation An attempt was made to start the NTI ISSU negotiation, but it has already been started. The endpoint will probably be 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/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 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 %NTI-3-ISSU_NEGO_ASYNC_ERROR: Aync error during nego with 0x%x (%s)

Explanation The NTI ISSU process received an asynchronous error during negotiation with an endpoint. The endpoint will probably be reset.

Error Message $NTI-3-ISSU_NEGO_INCOMPATIBLE$: Negotiation incompatible for endpoint 0x

Explanation The NTI ISSU negotiation is not compatible for this endpoint. The endpoint will probably be 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/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 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 %NTI-3-ISSU_NOT_INIT: NTI ISSU is not initialized, endpoint 0x%x.

Explanation The NTI ISSU process is not initialized. The endpoint will probably be 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/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 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 %NTI-3-ISSU_PLATFORM_TRANSPORT_NEGO_GET_REQ_PAK: NTI ISSU failed to get an platform transport nego message

Explanation The NTI ISSU process was unable to receive a platform transport negotiation message. The endpoint will probably be reset.

Error Message %NTI-3-ISSU_PLATFORM_TRANSPORT_NEGO_SEND: NTI ISSU failed to send an
platform transport nego message to 0x%x

Explanation The NTI ISSU process was unable to send a negotiation message using the platform transport. The endpoint will probably be 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/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 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 %NTI-3-ISSU_RCVD_NEGO_NOT_DONE: NTI ISSU negotiation not done when
received a message from 0x%x

Explanation The NTI ISSU process received a message before negotiation was done. The message cannot be processed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %NTI-3-ISSU_RCVD_TRANS_FAILED: NTI ISSU failed to transform received message from 0x%x

Explanation The NTI ISSU process was unable to transform a received message. The message cannot be processed.

Error Message %NTI-3-ISSU_RCVD_UNKNOWN_MSG: NTI ISSU received an unknown message
type %d from 0x%x

Explanation The NTI ISSU process received a message whose type is unknown. The message cannot be processed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %NTI-3-ISSU_RCV_FAILED: NTI ISSU failed to transform message type %d
for receive from 0x%x (%s)

Explanation The NTI ISSU process was unable to transform the message for receive. The message cannot be processed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %NTI-3-ISSU_REG_ADD: NTI ISSU failed to hook to the registry %s

Explanation The NTI ISSU process was unable to hook to a registry. This endpoint will probably be reset.

Error Message %NTI-3-ISSU_REG_RECEIVE_NEGO_MSG: NTI ISSU failed call the platform receive nego message registry

Explanation The NTI ISSU process was unable to call the platform receive negotiation message registry. The endpoint will probably be 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/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 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 $NTI-3-ISSU_TRIG_NEGO_NOT_DONE: NTI ISSU negotiation not done when getting a trigger from <math>0x8x$

Explanation The NTI ISSU process received a trigger from this endpoint before the negotiation was done. The trigger will be ignored.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %NTI-3-ISSU_UNKNOWN_MSG_TYPE: NTI ISSU got an unknown message type: %d

Explanation The NTI ISSU process received an unknown message type while trying to get the message MTU. The message cannot be sent.

Error Message %NTI-3-ISSU_XMIT_FAILED: NTI ISSU failed to transform message type %d
for transmit to 0x%x (%s)

Explanation The NTI ISSU process was unable to transform the message for transmit. The message cannot be sent.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %NTI-3-TRIG_ABORT_ALL_CLIENTS: %s Aborting trigger processing for all
clients as requested by the platform, EP ID 0x%x trigger type %s trigger group %s

Explanation Trigger processing has been aborted for all clients due to a platform request.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %NTI-3-TRIG_CLIENT_NOTINLIST: %s Cannot trigger NTI client (%d) for
this EP: could not find client in list, EP ID 0x%x

Explanation An NTI client could not be triggered for an endpoint because the client could not be found in the list.

Error Message %NTI-3-TRIG_INIT_ALREADY_IN_PROGRESS: %s Cannot initiate NTI trigger for EP ID 0x%x at this time: trigger processing of trigger type %s, trigger group %s already in progress

Explanation An NTI trigger could not be initiated because a trigger is already in progress.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %NTI-3-TRIG_PROCESSING: %s Trigger processing ERROR for client (#%d - %s), EP ID 0x%x trigger type %s trigger group %s : %s

Explanation An NTI trigger processing 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 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.

NTP Messages

This section contains network time protocol (NTP) messages.

NTP-4

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 to its peer is lost.

Recommended Action 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.

NTP-5

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.

NTP-6

Error Message %NTP-6-PEERREACH: Peer [IP_address] is reachable

Explanation The NTP peer is reachable.

Recommended Action No action is required.

Error Message %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 is disabled.

Recommended Action Check to see if NTP has been manually disabled by the administrator.

OBFL Messages

This section contains Onboard Failure Logging (OBFL) messages.

OBFL-5

Error Message %OBFL-5-DISABLED: Onboard Failure Logging disabled

Explanation Onboard Failure Logging has been disabled.

Recommended Action No action is required.

OBFL_ERRMSG Messages

This section contains Onboard Failure Logging (OBFL) error messages.

OBFL_ERRMSG-5

Error Message %OBFL_ERRMSG-5-FILECREATEFAIL: OBFL [chars] App failed to open/create
file [chars] . Errno = [dec]

Explanation The file open or creation operation failed.

Recommended Action No action is required.

Error Message %OBFL_ERRMSG-5-FILEFSTATFAIL: OBFL [chars] App failed to fstat file
[chars] . Errno = [dec]

Explanation The file fstat operation failed.

Recommended Action No action is required.

Error Message %OBFL_ERRMSG-5-FILELSEEKFAIL: OBFL [chars] App failed to Lseek file
[chars] . Errno = [dec]

Explanation The file Iseek operation failed.

Recommended Action No action is required.

Error Message %OBFL_ERRMSG-5-FILEMINFREEFAIL: OBFL [chars] App failed to set coalesce min free

Explanation Failed to set the coalesce minimum free value.

Error Message %OBFL_ERRMSG-5-FILEOPENFAIL: OBFL [chars] App failed to open file
[chars] . Errno = [dec]

Explanation The file open operation failed.

Recommended Action No action is required.

Error Message %OBFL_ERRMSG-5-FILEREADFAIL: OBFL [chars] App read failure on file
[chars] . Errno = [dec]

Explanation The file read operation failed.

Recommended Action No action is required.

Error Message %OBFL_ERRMSG-5-HISTFILESMALL: OBFL [chars] App: history file is exceedingly small

Explanation The history file for this application has been detected to be very small.

Recommended Action No action is required.

OCE Messages

This section contains output chain elements (OCE) infrastructure messages.

OCE-3

Error Message %OCE-3-MISSING_HANDLER_FOR_SW_OBJ: Missing handler for '[chars]'
function

Explanation An internal API request has been ignored because it was unexpected.

Error Message %OCE-3-MISSING_HANDLER_FOR_SW_OBJ_TYPE: Missing handler for '[chars]'
function for type [chars]

Explanation An internal API request has been ignored because it was 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/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 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-OCE_CHANGED_BY_APPLY_FUNCTION: Target OCE[hex_addr] changed
to[hex_addr] by apply function[hex_addr]

Explanation An internal API request has been ignored because it was 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/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 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-OCEDEPDUMP: [chars]

Explanation An error condition triggered display of OCE dependents.

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 reinject forwarding state handle, as the maximum number of handles are already in use.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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-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 reuse.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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-QUEUE_UNLOCK: Failed to [chars] unlock[chars] for [chars] oce
[hex]

Explanation Failed to enqueue a unlock for an OCE. This condition may lead to a memory leak.

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.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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_SW_OBJ_TYPE: SW_OBJ handle/type mismatch; expecting
oce type [chars], found [dec]

Explanation An internal API request has been ignored because it was 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/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 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-UNINITIALIZED_VECTOR: Improperly initialized [chars] vector in
[chars] OCE bundle [hex], packet dropped

Explanation An OCE bundle vector was improperly initialized.

ODM Messages

This section contains online diagnostics manager (ODM) subsystem messages.

ODM-3

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.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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], [chars] [chars] Failed

Explanation The online diagnostic test for the subcard specified in the error message has failed.

OER_TT_FLOW Messages

This section contains Optimized Edge Routing (OER) top talkers flow border router messages.

OER_TT_FLOW-2

Error Message %OER_TT_FLOW-2-OER_TT_FLOW_BR_CACHEINIT: Error initializing OER TT
Flow BR cache

Explanation The NetFlow top talker cache could not be initialized on the border router 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 The OER NetFlow top talker export queue could not be initialized on the border router 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.

OER_TT_FLOW-4

Error Message %OER_TT_FLOW-4-OER_TT_FLOW_BR_FLOWEXPORT: Error exporting [chars]

Explanation An error involving a flow to the route processor has occurred.

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

OIR Messages

This section contains online insertion and removal (OIR) messages.

OIR-3

Error Message %OIR-3-HARD_RESET: Module [dec] is being hard reset as a part of switchover error recovery

Explanation The specified module is being hard reset as a recovery for failure to respond to a switchover message.

Recommended Action No action is required.

Error Message %OIR-3-ISSU_RESET: Module %d is being hard reset as a part of ISSU
upgrade

Explanation The specified module is being hard reset as part of a planned ISSU upgrade.

Recommended Action No action is required.

Error Message %OIR-3-PSM_SUBCARDDETECT: Slot [dec] [chars] [dec]: subcard [dec]
inserted

Explanation A protection switch module (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 protection switch module (PSM) subcard has been removed from the specified slot.

Recommended Action No action is required.

Error Message %OIR-3-SOFT_RESET: Module [dec] is being soft reset as a part of switchover error recovery

Explanation The specified module is being soft reset as a part of switchover error recovery.

Error Message %OIR-3-SOFT_RESET_SSO: Module %d is being soft reset as a part of switchover error recovery

Explanation The specified module is being soft reset as a part of a switchover error recovery.

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 redundant supervisor engine was notified that a module on the active supervisor engine is unresponsive. The module is being power-cycled.

Recommended Action No action is required.

Error Message %OIR-3-STDBY_UNKNOWN: Standby was notified, Unknown card in slot [dec]

Explanation The OIR facility on the redundant supervisor engine was notified that an undetermined module was detected on the active supervisor engine.

Recommended Action Reseat the module in the specified slot.

Error Message %OIR-3-UCODE_INTERNAL: The image download to card in slot [dec] failed due to internal error: [chars], [chars]

Explanation An internal error has occurred in the line card image download code.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the remote command switch dir system:image/ command to gather data that may help identify the cause 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/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.

OIR-4

Error Message %OIR-4-DISABLE: Unsupported service module [chars] in slot [dec] disabled

Explanation This service module is not supported in this release of software.

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 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-4-INSERTION: Possible half inserted module detected in slot [dec] or a slow insertion

Explanation This module is either inserted improperly or is not making a full contact to the backplane or it is being insert very slowly. The user should follow the cisco recommandation on module insertion procedures.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

Error Message %OIR-4-WARN: [chars]

Explanation The OIR facility detected the specified 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/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 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.

OIR-6

Explanation CWAN card already present in the slave chassis of a virtual switch should not be powered up during ISSU. It will be powered up on switchover or upon completion of ISSU.

Error Message %OIR-6-DIAG_OFFLINE: Card inserted in slot [dec], is now ready for offline diagnostics

Explanation The OIR facility detected a newly inserted line card. The line card is configured for the offline diagnostic state by the user. This state can be entered only after the module is in the online diagnostic state.

Recommended Action This is an informational message only. No action is required.

Error Message %OIR-6-DIAG_ONLINE: Card inserted in slot [dec], is now ready for online diagnostics

Explanation The OIR facility detected a newly inserted line card. The line card is configured for the online diagnostic state by the user or if diagnostic failure is detected during bootup.

Recommended Action This is an informational message only. No action is required.

Error Message %OIR-6-DOWNGRADE: Fabric capable module [dec] 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 run only in flowthrough (bus) mode.

Recommended Action Upgrade the line card hardware.

Error Message %OIR-6-DOWNGRADE_EARL: Module [dec] [chars] 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 This is an informational message only. No action is required.

Error Message %OIR-6-INSFAN: Fan [dec] inserted

Explanation The OIR facility detected a newly inserted fan tray.

Recommended Action This is an informational message only. No action is required.

Error Message %OIR-6-NOPWRISSU: Card inserted in slot %d powered down because ISSU is in progress

Explanation The online insertion and removal (OIR) facility detected a newly inserted line card during an ISSU upgrade process. The new card will be powered down until completion of the ISSU.

Error Message %OIR-6-PWRFAILURE: Module [dec] is being disabled due to power convertor failure [hex]

Explanation The DC-DC power converter failed on this module and must be replaced.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %OIR-6-REMFAN: Fan [dec] removed

Explanation The OIR facility detected the removal of a fan tray [n].

Recommended Action This is an informational message only. No action is required.

Error Message %OIR-6-SEQ_MISMATCH: SCP seq mismatch for card in slot [dec] : [chars]

Explanation The OIR facility detected an SCP sequence mismatch for the card in the specified slot.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %OIR-6-SOFT_RESET_ISSU: Module [dec] is being soft reset as a part of
ISSU cycle

Explanation The module specified in error message is being soft reset as a part of ISSU cycle.

Recommended Action No action is required.

Error Message %OIR-6-STDBY_INSCARD: Standby was notified, card online in slot [dec]

Explanation The OIR facility on the standby supervisor engine was notified by the active supervisor engine that a processor was inserted in slot [n] and that all the interfaces are now usable.

Error Message %OIR-6-STDBY_REMCARD: Standby was notified, card removed from slot
[dec]

Explanation The OIR facility on the standby supervisor engine was notified by the active supervisor engine that a processor from the specified slot has been removed.

Recommended Action No action is required.

OIR_ISSU Messages

This section contains online insertion and removal (OIR) in-service software upgrade (ISSU) messages.

OIR_ISSU-3

Error Message %OIR_ISSU-3-BUFFER: Cat6K OIR ISSU client failed to a buffer for
message, error %d

Explanation The online insertion and removal (OIR) ISSU client failed to get a buffer for building a negotiation message. As a result, the client cannot send a negotiation message to the standby unit and the standby unit cannot be brought 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/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 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, show logging, and show checkpoint client commands and your pertinent troubleshooting logs.

Error Message %OIR_ISSU-3-CAPABILITY: Cat6K OIR ISSU client %s

Explanation During capability negotiation, the OIR ISSU client detected an error that results in a mismatch between the client capability of the active and standby units.

Error Message %OIR_ISSU-3-INIT: Cat6K OIR ISSU client initialization failed at %s,
error %s

Explanation The OIR ISSU client could not be initialized. This condition will cause a catastrophic failure when an ISSU upgrade or downgrade is performed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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_ISSU-3-MSG_NOT_OK: Cat6K OIR ISSU client message %d is not compatible

Explanation The OIR ISSU client received an incompatible message from the peer unit. The message cannot be processed by this unit.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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, show logging, show issu message group, show issu session, and show issu negotiated version commands and your pertinent troubleshooting logs.

Error Message %OIR_ISSU-3-MSG_SIZE: Cat6K OIR ISSU client failed to get the message size for message %d

Explanation The OIR ISSU client was unable to calculate the message size for the message specified. The client will be unable to send the message to the standby unit.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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, show logging, show issu message group, show issu session, and show issu negotiated version commands and your pertinent troubleshooting logs.

Error Message %OIR_ISSU-3-POLICY: Cat6K OIR ISSU client message type %d is %s

Explanation The OIR ISSU client received a message type that it does not support. A policy is applied to make the session compatible.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 issu session commands and your pertinent troubleshooting logs.

Error Message %OIR_ISSU-3-SEND_FAILED: Cat6K OIR ISSU client failed to send a
negotiation message, error %d

Explanation The OIR ISSU client could not send a session negotiation message to the peer. As a result, the standby unit cannot be brought 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/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 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, show logging, and show checkpoint client commands and your pertinent troubleshooting logs.

Error Message %OIR_ISSU-3-SESSION: Cat6K OIR ISSU client %s

Explanation The OIR ISSU client detected an error during a session negotiation with the peer unit. As a result, the standby unit cannot be brought 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/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 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, show logging, show issu capability entries, show issu session, and show issu negotiated capability commands and your pertinent troubleshooting logs.

Error Message $\text{\%OIR_ISSU-3-TRANSFORM:}$ Cat6K OIR ISSU client %s transform failed, error %s

Explanation The OIR ISSU client could not transform the message. If the transmit transformation failed, the checkpoint message cannot be sent to the standby unit. If the receive transformation failed, the checkpoint message cannot be applied on the standby unit. In either case, the OIR state of the bay will not be identical with the active unit.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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, show logging, show issu session, and show issu negotiated version commands and your pertinent troubleshooting logs.

OIR-SP

Error Message %OIR-SP-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.

Error Message %OIR-SP-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-SP-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-SP-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.

OLM Messages

This section contains Optical Link Management (OLM)) and Link Management Protocol (LMP) messages.

OLM-3

Error Message %OLM-3-UNAVAILABLE: Failed to send LMP msg to %s

Explanation Attempt to send LMP control message has failed; this could be due to 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/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 %OLM-3-UNAVAILABLE: Internal error: Couldn't find neighbor while %s

Explanation An LMP processing that requires to access information about the neighbor has found that no such neighbor exists. This could be due to internal error.

Recommended Action Turn on generic and packet level debugging using the command, debug ip lmp and gather LMP configuration using the command, show ip olm and gather the displayed information and contact Cisco technical assistance.

Error Message %OLM-3-UNAVAILABLE: Service Discovery: Attribute %s incompatible with neighbor %s

Explanation Specified service attribute does not match with neighbor. The neighbor and/or the local node may not be properly configured.

Recommended Action Use the **show mpls uni lmp neighbor** command on the local as well as the neighbor node (where applicable), to determine the service attributes and modify the configuration, where feasible, to ensure that the attributes match

Explanation Port-level service attribute does not match with those of the neighbor. The neighbor and/or the local node may not be properly configured.

Recommended Action Use the **show mpls uni lmp neighbor** command on the local as well as the neighbor node (where applicable), to determine the service attributes and modify the configuration, where feasible, to ensure that the port-level service attributes match

Error Message %OLM-3-UNAVAILABLE: State %s; Event %s

Explanation An LMP state machine has encountered an event that is not legal or allowed in the current state.

Recommended Action Write down the state and the event and call your Cisco technical support representative for assistance.

OLM-4

Error Message %OLM-4-UNAVAILABLE: Bad LMP Msg; type %u

Explanation An LMP message has been received with invalid message type. This suggests that we have 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. On seeing an ill-formed LMP packet, gather displayed information and contact the Cisco technical assistance.

Error Message %OLM-4-UNAVAILABLE: Bad TLV; type %u

Explanation An LMP message has been received with invalid TLV type. This suggests that we have 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. On seeing an ill-formed LMP packet, gather displayed information and contact the Cisco technical assistance.

Error Message %OLM-4-UNAVAILABLE: Invalid TLV Length %u in LMP msg; remaining size %u

Explanation An LMP message has been received with invalid TLV length. This suggests that we have 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. On seeing an ill-formed LMP packet, gather displayed information and contact the Cisco technical assistance.

OLM-5

Error Message %OLM-5-UNAVAILABLE: Internal error: Couldn't find IPCC to send LMP msg;
msg type : %u

Explanation This is generally caused by race conditions wherein an LMP message is received from a neighbor before the first control channel goes UP [locally]. This conditions usually happens when a node reboots.

Recommended Action If the problem persists even after the node has completed initialization, enter sho ip olm command to find the LMP configuration and use the debug ip lmp packets and debug ip lmp generic command to gather additional context type information and call Cisco technical assistance.

Error Message %OLM-5-UNAVAILABLE: Invalid TE Link ID %u in Link Summary message

Explanation A Link Summary or Link Summary Ack or Link Summary Nack message has been received with bad TE Link ID. The sending node probably doesn't have LMP configured correctly.

Recommended Action Locate the neighbor from which the LMP message with invalid TE Link ID was received and enter show ip olm command and make sure that the port ID mappings between the two nodes are correct

Error Message %OLM-5-UNAVAILABLE: LMP %s msg id %u not 1+%u

Explanation An LMP message has been received with message id that is not sequential within the Control channel or TE Link. This situation is not caused by the known cases that cause message id sequence to be broken, including local node reboot, neighbor node reboot and neighbor retransmission

Recommended Action Enter the show ip olm stat command when this problem occurs and gather the information displayed and call the Cisco technical assistance.

Error Message %OLM-5-UNAVAILABLE: LMP revd msg from unknown src ip 0x%i, link %

Explanation An LMP message has been received from a neighbor that we don't know about. This could be due to the fact that the neighbor in question has not yet been configured on this node.

Recommended Action Locate the problem neighbor using the IP address and enter a show ip olm command; gather the displayed info and contact Cisco technical assistance.

Error Message %OLM-5-UNAVAILABLE: Link Summary parameter(%s) mismatch

Explanation Port ID and other link summary parameters do not match with those on the neighbor in question. The neighbor and/or the local node is not properly configured.

Recommended Action Enter the show ip olm command on the local as well as the neighbor node and make sure that the port IDs match.

Error Message %OLM-5-UNAVAILABLE: No such neighbor to assign

Explanation User attempted to assign interface to invalid neighbor

Recommended Action Use show olm to find the correct neighbor name

ONLINE Messages

This section contains SCP (Switch-module Configuration Protocol) download processor messages.

ONLINE-2

Error Message %ONLINE-2-LCP_BOOT_MISMATCH: The system detected LCP boot version mismatch for module in slot [dec], 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 condition would normally occur if the LCP boot version on the 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.

ONLINE-3

Error Message %ONLINE-3-UNKNOWN_CARD_TYPE: Unknown card type is encountered:
card_type = [int]

Explanation The card type is unknown or 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/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 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.

ONLINE-6

Error Message %ONLINE-6-BOOT_TIMER: Module %d, Proc. %d. Failed to bring online because of boot timer event

Explanation The system was unable to download the runtime image to the module and processor because the boot did not complete in the allocated time.

Recommended Action No action is required.

Error Message %ONLINE-6-DNLD_TIMER: Downloading image to Module [dec], Proc. [dec]. has failed, due to download timer expiry

Explanation The system was unable to download the runtime image to the module and processor because the download did not complete in the allocated time.

Recommended Action No action is required.

Error Message %ONLINE-6-DOWNLOAD_TIMER: Module %d, Proc. %d. Failed to bring online because of download timer event

Explanation The system was unable to download the runtime image to the module and processor because the download did not complete in the allocated time.

Recommended Action No action is required.

Error Message %ONLINE-6-FIND_MASTER_FAIL: Module %d, Proc. %d. SCP_DNLD failed to find master

Explanation The system was unable to find the master to download an image to the module and processor within the allocated time.

Recommended Action No action is required.

Error Message %ONLINE-6-GET_IMAGE_FAIL: Module %d, Proc. %d. SCP_DNLD failed to get image

Explanation The system was unable to get the image from the master for downloading to the module and processor.

Recommended Action No action is required.

Error Message %ONLINE-6-INVALID_DNLD_REQ: Received an unexpected image download request from Linecard Module [dec], Proc [dec]. Linecard image download request reason was [chars]

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 $%ONLINE-6-LCC_CONFIG_FAIL$: Module %d. LCC Client %s failed to configure at %08x

Explanation During a Secure Copy (SCP) download, the Linecard Configuration Coordinator (LCC) client failed to finish configuration of the module.

Recommended Action No action is required.

Error Message %ONLINE-6-LCP_DNLD: Error while downloading image to Module [dec],
Proc. [dec].: [chars]

Explanation An error was encountered while downloading an image to a switching module. The first [dec] is the module number, the second [dec] is the process number, and [chars] is the message explanation.

Recommended Action No action is required.

Error Message <code>%ONLINE-6-ONLINE_TIMER: Module %d, Proc. %d. Failed to bring online because of online timer event</code>

Explanation The system was unable to download the runtime image to the module and processor because the online event did not happen in the allocated time.

Recommended Action No action is required.

Error Message <code>%ONLINE-6-READY_TIMER: Module %d, Proc. %d. Failed to bring online because of ready timer event</code>

Explanation The system was unable to download the runtime image to the module and processor because the ASIC initialization did not complete in the allocated time.

Recommended Action No action is required.

Error Message %ONLINE-6-REGN_TIMER: Module %d, Proc. %d. Failed to bring online because of registration timer event

Explanation The system was unable to download the runtime image to the module and processor because the registration did not complete in the allocated time.

Recommended Action No action is required.

Error Message %ONLINE-6-RUNNING_TIMER: Module %d, Proc. %d. Failed to bring online because of running timer event

Explanation The system was unable to download the runtime image to the module and processor because the running event did not happen in the allocated time.

Recommended Action No action is required.

ONLINEDIAG Messages

Error Message %ONLINEDIAG-2-CPU_SWITCH_LB_TST_PKT_THRESH_ERROR: CPU Switch
Interface : [dec]/[dec] of online diagnostic packets in error.

Explanation The packet loss can be due to congestion.

Recommended Action Issue the command **show diag online cpu sw** 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**.

ONS15530 Messages

This section contains Cisco ONS 15530 trunk card messages.

ONS15530-1

Error Message %ONS15530-1-DISCOVER ENET: Failed to init Ethernet device [dec]

Explanation The software could not be initialized.

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/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 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.

ONS15530-2

Error Message %ONS15530-2-UNAVAILABLE: 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 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 %ONS15530-2-UNAVAILABLE: 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.

Error Message %ONS15530-2-UNAVAILABLE: 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 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 %ONS15530-2-UNAVAILABLE: Out of range card slot index%d

Explanation The software specified an out-of-range card slot index.

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 %ONS15530-2-UNAVAILABLE: 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 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.

 ${\bf Error\,Message}$ %ONS15530-2-UNAVAILABLE: 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 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

Error Message %ONS15530-3-UNAVAILABLE: Access to %s temperature sensor failed

Explanation Accesses to chassis temperature sensor 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/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-UNAVAILABLE: 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 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-UNAVAILABLE: 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-UNAVAILABLE: 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.

Error Message %ONS15530-3-UNAVAILABLE: 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-UNAVAILABLE: Unknown chassis model.

Explanation Data stored in midplane is bad or incomplete.

Recommended Action Contact technical support to update your system.

Error Message %ONS15530-3-UNAVAILABLE: 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.

ONS15530-4

Error Message %ONS15530-4-UNAVAILABLE: Invalid CPU ID, assuming revision 1

Explanation The CPU ID could not be read from EEPROM. This is probably due to a hardware failure.

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 %ONS15530-4-UNAVAILABLE: Unknown MAC address block size.

Explanation Data stored in midplane is bad or incomplete.

Recommended Action Contact technical support to update your system.

ONS15530-5

Error Message %ONS15530-5-UNAVAILABLE: Compact flash card (disk0) %s

Explanation A file system's status has changed. Follow any instructions provided with the message.

 $\label{local_commended} \textbf{Recommended Action} \quad LOG_STD_NO_ACTION.$

00BP-4

Error Message %00BP-4-UNAVAILABLE: 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 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 %00BP-4-UNAVAILABLE: 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 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.

OPTICAL_MONITOR Messages

This section contains optical monitoring messages.

OPTICAL MONITOR-4

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/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 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-1

Error Message %OPTICAL_IF-1-UNAVAILABLE: %s, %s: %s

Explanation The specified Alarm has been declared or cleared

Recommended Action Recommended action is to repair the source of the alarm.

OPTICAL IF-3

Error Message %OPTICAL_IF-3-UNAVAILABLE: %s

Explanation The metopt subsystem encountered an internal software error. The error message contains text which 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/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.

OPTICAL IF ALARMS-3

Error Message %OPTICAL_IF_ALARMS-3-UNAVAILABLE: High Alarm Threshold for %s on port
%s %s

Explanation High alarm threshold 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 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 %OPTICAL_IF_ALARMS-3-UNAVAILABLE: High Warning Threshold for %s on
port %s %s

Explanation High warning threshold 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 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 %OPTICAL_IF_ALARMS-3-UNAVAILABLE: Low Alarm Threshold for %s on port
%s %s

Explanation Low alarm threshold 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 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 %OPTICAL_IF_ALARMS-3-UNAVAILABLE: Low Warning Threshold for %s on port
%s %s

Explanation Low warning threshold 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 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.

OSCP-3

Error Message %OSCP-3-UNAVAILABLE: %s %x

Explanation An internal software error occurred. The message contains more information that can be used to identify 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/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.

OSCP-4

Error Message %OSCP-4-UNAVAILABLE: Configuration Error: %s

Explanation This message indicates a configuration error in the OSCP subsystem. The message will display more specific information about the cause of problem.

Recommended Action Change the configuration to correct the error.

Error Message %OSCP-4-UNAVAILABLE: Invalid pkt: %s %d %d

Explanation An invalid packet was received from a network peer.

Recommended Action Check the originating device for a cause of the corrupted packets.

OSCP-7

Error Message %OSCP-7-UNAVAILABLE: %s

Explanation This is an informational message only. It is used by Cisco for testing.

Recommended Action Informational messages can be disabled by changing logging level.

OSM_MULTILINK Messages

This section contains Optical Services Module distributed multilink (OSM_MULTILINK) messages.

OSM MULTILINK-3

Error Message %OSM_MULTILINK-3-PROCESS_FAIL: Process creation failed for [chars]

Explanation The system failed to create a process. The probable cause of this condition is that the system has low memory.

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

OSM MULTILINK-4

Error Message %OSM_MULTILINK-4-BUNDLEERROR: Bundle([chars]) is not distributed

Explanation The bundle specified in the 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 [chars]
searching for [chars]

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-BUNDLEVC: [chars] for vc [dec] and if_index [dec]

Explanation A software error has occurred while a bundle was being provisioned.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 [chars]

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-IPCNOTREADY: Bundle process on the line card is not ready to handle message of type [dec]

Explanation Bundle is being deleted on the line card due to an **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 very quick succession.

Recommended Action Reset the line card.

Error Message %OSM MULTILINK-4-MLPSBNULL: Unexpected subblock missing for [chars]

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([dec]) in [chars]

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-QUEUE_BUNDLE: Not able to queue the bundle ([chars]),
Num. of bundles [dec]

Explanation A software error has occurred while a bundle was being inserted in the 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

Error Message %OSM_MULTILINK-5-BUNDLEEXCEEDED: Bundle([chars]) cannot be associated
with link([chars]), max [dec]

Explanation The number of bundles has exceeded the limit for the group belonging to the link. The bundle specified in the error message will not work in distributed mode. If the module is CT3 (OSM-CT3 module), then ports 1–12 belong to one group. If the module is a CHOC-3 module (OSM-CHOC-DS0 module), then ports 1–4 belong to one group. If the module is a CHOC-12 module (OSM-CHOC-DS0 module), then 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-- [chars] to bundle [chars] reason:[chars]

Explanation The bundle link could not be set up. A configuration or resource limit has been reached. The bundle may be forced to become inactive (go down). If the line card is a CT3 (OSM-CT3 line card), then ports 1–12 belong to one group. If the line card is a CHOC-3 (OSM-CHOC-DS0 line card), then ports 1–4 belong to one group. If the line card is a CHOC-12 (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 maximum 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** commands on the multilink interface to shut down and restart the interface.

OSPF Messages

This section contains Open Shortest Path First (OSPF) messages.

OSPF-3

Error Message %OSPF-3-CFG_NBR_ALLOC_FAILED: Could not allocate or find neighbor
[IP_address]

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 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-CFG_NBR_FAILED: Neighbor [IP_address] 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.

Explanation The interface is attached on the interface list to an area other than the one that 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 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 [chars], [chars].

Explanation The interface initialization failed. The following are possible reasons:

- The area to which the interface is being attached is being deleted.
- It was not possible to create a neighbor datablock for the local router.

Recommended Action Remove the configuration command that covers the interface and try 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 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-LSA_LEN: Area [chars] router-LSA of length [dec] bytes plus update overhead [dec] bytes is too large to flood.

Explanation The router tried to build a router-LSA that 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 must decrease the number of OSPF interfaces in the reported area.

OSPF-4

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 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-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 or point-to-multipoint.

Recommended Action No action is required.

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 %OSPF-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 %OSPF-4-INVALID_METRIC: OSPF-%d Area %s: Router %i originating invalid type %d LSA, ID %i, Metric %d on Link ID %i Link Type %d

Explanation The router indicated in this message has originated a Link-State Advertisement (LSA) with an invalid metric. If this is a router LSA and the link metric is zero, routing loops and traffic loss could occur in the network.

Recommended Action On the router that originated the reported LSA, configure a valid metric for the given LSA type and link type.

Error Message %OSPF-4-INV_LSA_BLD_FLG: Invalid build flag [hex] for LSA
[IP_address], type [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/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 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 [chars]

Explanation The interface is not point-to-point and is unnumbered.

Recommended Action Either change the interface type to point-to-point or give the interface an IP address.

Error Message %OSPF-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 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-NORTRID: OSPF process [dec] 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 multiple OSPF processes are running on the router, each requires a unique router ID. Configure a unique router ID manually by entering the **router-id** *a.b.c.d* command, or configure an interface in the same VRF table by entering the **ip vrf forwarding** *word* 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-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 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
[hex]

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 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 "[chars]" - [dec] LSAs

Explanation The maximum number of non-self-generated LSAs has been exceeded.

Recommended Action Check if some router in the network is generating a large number of LSAs as a result of misconfiguration.

Error Message %OSPF-4-OSPF_MAX_LSA_THR: 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 if some router in the network is generating a large number of LSAs as a result of misconfiguration.

Error Message %OSPF-4-RTRID_IN_USE: Router-ID [IP_address] is in use by ospf process
[dec]

Explanation An attempt was made to assign a router ID that 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 [dec] in OSPF [chars]

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 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-6

Error Message %OSPF-6-BAD_LSA_COUNT: OSPF-%d Area %s: LSA ID %i, Type %d, Adv-rtr
%i, LSA counter %s

Explanation An internal error was found and automatically corrected in an OSPF Link-State Advertisement (LSA). This error does not affect 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/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 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 tech-support ospf commands and your pertinent troubleshooting logs.

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 %OSPF-6-UNREC_VIRT_INT_TYPE: Unrecognized virtual interface [chars].
Treat it as loopback stub route

Explanation Because the virtual interface type was not recognized by OSPF, it will be treated as a loopback interface stub route.

Recommended Action No action is required.

OSPFv3 Messages

This section contains Open Shortest Path First (OSPF) version 3 messages.

OSPFv3-3

Error Message %OSPFv3-3-UNAVAILABLE: 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 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-UNAVAILABLE: DB already exist : area \$s lsid \$i adv \$i type 0x\$x

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 %OSPFv3-3-UNAVAILABLE: 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-UNAVAILABLE: 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. Copy the message exactly as it appears on the 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 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-UNAVAILABLE: 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-UNAVAILABLE: 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 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-UNAVAILABLE: OSPF is enabled on %s during idb initialization

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 %OSPFv3-3-UNAVAILABLE: 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 %OSPFv3-3-UNAVAILABLE: Reached unknown state in neighbor state machine

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 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-UNAVAILABLE: 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 %OSPFv3-3-UNAVAILABLE: lsid %i adv %i type 0x%x 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.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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

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.

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.

Error Message %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 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 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 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 [hex], area [hex]
, interface [hex]

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 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-INVALID_METRIC: OSPFV3-\d Area \$s: Router \$i originating invalid type 0x\$x LSA, ID \$u, Metric \$d on Link ID \$d Link Type \$d

Explanation The specified router has originated a Link-State Advertisement (LSA) with an invalid metric. If this is a router LSA and the link metric is zero, routing loops and traffic loss could occur in the network.

Recommended Action On the router that originated the reported LSA, configure a valid metric for the given LSA type and link type.

Error Message %OSPFv3-4-INV_LSA_BLD_FLG: Invalid build flag [hex] for LSA
[IP_address], type [hex]

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 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-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 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 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
[hex]

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 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 [IP_address] is in use by ospf
process [dec]

Explanation An attempt was made to assign a router ID that 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 [dec] in OSPF process [chars]

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 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 ([chars]/[chars]) on a single link detected. This is not supported

Explanation OSPFv3 enabled on multiple interfaces that 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 [dec] in OSPF [chars]

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 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.

OSPFv3-5

Error Message %OSPFv3-5-UNAVAILABLE: 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 LOG_STD_NO_ACTION

OSPFv3-6

Error Message %OSPFv3-6-UNREC_VIRT_INT_TYPE: Unrecognized virtual interface
[chars]. Treat it as loopback stub route

Explanation Because the virtual interface type was not recognized by OSPFv3, it will be treated as a loopback interface stub route.

Recommended Action No action is required.

OUNIC-4

Error Message %OUNIC-4-UNAVAILABLE: %s

Explanation IOS OS API routine return error

Error Message %OUNIC-4-UNAVAILABLE: %s(%s): %s

Explanation RSVP API routine return error

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

Error Message %OUNIC-4-UNAVAILABLE: failed getting local_port_id for: neighor %i,
remote_port_id=%d

Explanation Destination O-UNI client cannot find its own local_port_id

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

OTNMGR Messages

Error Message %OTNMGR-3-OTN_STATS_CREATE_IF_FAIL: stats for interface index [dec]
could not be created with status [dec]

Explanation N/A

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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.

PACC Messages

This section contains Cisco 7300 port adapter carrier card (PACC) messages.

PACC-3

Error Message %PACC-3-RXPAKLEN: PA-CC FPGA detected an ingress packet length error
on slot [dec]

Explanation The PA carrier card has detected a packet length error during reception of an ingress packet. This condition could be caused by one of the following:

- Faulty hardware (either the Cisco 7300 or the PA carrier card)
- A corrupted FPGA image
- A software problem (least likely).

Recommended Action If this message occurs frequently, remove and reinsert the PA carrier card. If reseating the card does not fix the problem, a later Cisco IOS image may have an updated FPGA bundle that could solve the problem. If this message recurs, copy the error message exactly as it appears on the 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 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 %PACC-3-TXPAKLEN: PA-CC FPGA detected an egress packet length error on slot [dec]

Explanation The PA carrier card has detected a packet length error during transmission of an egress packet. This condition could be caused by one of the following:

- Faulty hardware (either the Cisco 7300 or the PA carrier card)
- A corrupted FPGA image
- A software problem (least likely).

Recommended Action If this message occurs frequently, remove and reinsert the PA carrier card. If reseating the card does not fix the problem, a later Cisco IOS image may have an updated FPGA bundle that could solve the problem. If this message recurs, copy the error message exactly as it appears on the 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 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.

PA-0

Error Message %PA-0-UNAVAILABLE: Conflict detected when trying to install %s interrupt handler, bay %d.

Explanation An attempt was made to register an interrupt handler for either a non existent port adaptor or the wrong interrupt prority 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/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.

PA-2

Error Message %PA-2-UNAVAILABLE: Bad default register(%x) setting(%x) in PA bridge

Explanation The software is unable to configure certain settings for the port adapter protocol control information bridge in the specified bay.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PA-2-UNAVAILABLE: Failed to config bridge for PA %d

Explanation The system side PCI bridge for this PA failed initialization. The PA will not be operational because of this.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PA-2-UNAVAILABLE: Illegal Port Adaptor type %d in bay %d of %s.

Explanation The port adapter is not supported by the controller to which it is plugged into.

Recommended Action Remove the port adapter and return the controller to its original configuration.

Error Message %PA-2-UNAVAILABLE: Out of range PCI Port Adaptor bay %d

Explanation The software specified an out-of-range port adapter bay.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PA-2-UNAVAILABLE: Out of range PCI Port Adaptor interface, %d on bay
%d

Explanation The software specified an out-of-range port adapter 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 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 %PA-2-UNAVAILABLE: PA interface data incorrect, %#x

Explanation Incorrect PA interface data found

Error Message %PA-2-UNAVAILABLE: PA interface idb incorrect, % #x

Explanation The port adapter system control block (PASCB) data structure indicates a zero interface descriptor block (IDB).

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PA-2-UNAVAILABLE: PA interface pa incorrect, %#x

Explanation Incorrect PA interface specified

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PA-2-UNAVAILABLE: PA interface pascb incorrect, % #x

Explanation The port adapter system control block (PASCB) data structure was incorrectly set in the command data structure.

Error Message %PA-2-UNAVAILABLE: PA interface port_inst incorrect, %#x

Explanation Failure to access port instance internal data

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PA-2-UNAVAILABLE: PA interface vcont incorrect, %#x

Explanation Incorrect VC interface specified

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PA-2-UNAVAILABLE: PA null adapter, %#x

Explanation Null PA interface specified

Error Message %PA-2-UNAVAILABLE: PA queue overflow, cmd %#x

Explanation PA queue has overflowed; programming 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 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.

 $\mbox{\it Error Message}$ %PA-2-UNAVAILABLE: Recursive loop while getting the daughtercard info for PA 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 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 %PA-2-UNAVAILABLE: Undefined Port Adaptor type %d in bay %d

Explanation The software does not have a driver for the port adapter type in the specified bay.

Error Message %PA-2-UNAVAILABLE: Unsupported I/O Controller (type %d) in I/O Bay. The I/O Controller network interfaces will be unavailable.

Explanation The software does not have a driver for the port adapter type in the specified bay.

Recommended Action Make sure the image you are running is supposed to support this card. Newer I/O Controllers will only work with the -kboot- image. Copy the message exactly as it appears on the 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 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 %PA-2-UNAVAILABLE: Unsupported Port Adaptor Bridge %#x in bay %d

Explanation The software does not have a driver for that port adapter protocol control information bridge in the specified bay.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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.

PA-3

Error Message PA-3-UNAVAILABLE: Improper insertion for slot %d. Remove and then re-insert the PA

Explanation PCI Activation of PA has failed, thus the PA is deactivated and must be removed and then re-inserted.

Recommended Action Remove and then re-insert the PA firmly into the slot.

Error Message %PA-3-UNAVAILABLE: PA in slot%d (%s) is not supported on this %s

Explanation This port adaptor is not supported on this chassis/cpucard.

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 %PA-3-UNAVAILABLE: PA in slot%d (%s) requires base h/w revision of
(%d.%d) for this %s

Explanation A newer hardware revision of the port adaptor is required for functional operation on this chassis.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PA-3-UNAVAILABLE: Recommended port adapter configuration exceeded

Explanation The total bandwidth of fast and medium bandwidth port adapters exceed the rated capacity of this system.

Recommended Action Refer to the configuration guidelines for the maximum allowed high and medium bandwidth port adapters for the system.

Error Message %PA-3-UNAVAILABLE: This PA type (%s) is not supported in slot%d of this
%s

Explanation This port adaptor is not supported on this slot of this chassis/cpucard.

Error Message PA-3-UNAVAILABLE: Unable to create driver for Port Adaptor type %d in bay %d

Explanation Possible memory shortage or adaptor hardware 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 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 %PA-3-UNAVAILABLE: port adapter in bay [%d] failed to reset.

Explanation An attempt to reset and initialize the port adapter timed out.

Recommended Action This situation should correct itself. Copy the message exactly as it appears on the 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 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 %PA-3-UNAVAILABLE: port adapter in bay [%d] powered off.

Explanation The port adapter is being powered off.

PA-4

Error Message %PA-4-UNAVAILABLE: Improper removal for slot %d.

Explanation PA was inserted and then removed while being initialised.

Recommended Action After an insertion, the PA should be pulled out only after the initialisation is complete. If there is any traffic running through the router, the initialisation can take up to 30 seconds

Error Message %PA-4-UNAVAILABLE: PCI activation failed, bay %d, 0x%x

Explanation The system received an invalid PCI signal from the port adapter. 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 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.

PACKET Messages

This section contains packet messages.

Error Message %PACKET-3-BLKDUMP: [chars]

Explanation This message is for reporting general messages in the memory management code.

Error Message %PACKET-3-CLNTDISCONN: Handling disconnect for client [dec] ([chars])

Explanation The client ID was not found in the previous client list.

Recommended Action Remove the client's information from the list of all connected clients. Copy the message exactly as it appears on the 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 %PACKET-3-CORRUPTPAKHDR: Corruption in packet header [hex], pid [dec],
magic [hex], buffer [hex] caller_pc [hex]

Explanation The packet header has become 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/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 %PACKET-3-CORRUPTPAKPOOL: [chars] Pool [hex] corrupted, magic [hex]

Explanation The packet pool has become corrupted and has failed a consistency check.

Error Message %PACKET-3-ERRORPUNT: Intransit flag not set in [dec]

Explanation A packet that is being redirected across processes does not have the Intransit flag set.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PACKET-3-ERRPAKHDR: Not able to fix corruption in packet header [hex],
pid = [dec]

Explanation There has been a corruption in the packet header memory and it cannot be fixed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PACKET-3-PACKETHDRDUMP: [chars]

Explanation This message is used to report general packet header messages.

Error Message %PACKET-3-PARTICLEPAKDUPFAIL: Particle packet duplication attempted on non-particle packet

Explanation Duplication of packet with particles routine is called without the packet containing particles.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PACKET-3-RECOVERBLK: BLOCK [hex] IS SUCESSFULLY RECOVERED AFTER CORRUPTION

Explanation Corruption was detected in a memory block, and it was possible to recover the block 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 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 %PACKET-3-REINITSHMEM: Restarting [chars] to reinitialize shared memory because of memory corruption

Explanation There has been a memory corruption.

PACC-0

Error Message %PACC-0-UNAVAILABLE: %s HW DLLs failed to lock in linecard at slot %d

Explanation The port adapter carrier card has failed to initialize. This condition indicates a hardware failure.

Recommended Action Remove and reinsert the port adapter carrier card. If reseating the card does not fix the problem, a later IOS image may have an updated FPGA bundle that could potentially solve the problem. If this message recurs, do the following: show diag *slot-number*. Copy the message exactly as it appears on the 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 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 %PACC-0-UNAVAILABLE: %s initialization failure for slot %d, %s

Explanation The initialization of a device on the PA carrier card has failed. The error message first specifies the device whose initialization failed. Slot number and either the interface name or more details about the error are displayed at the end of the message. This condition indicates a software error.

Recommended Action Show memory summary. Copy the message exactly as it appears on the 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 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.

PACC-1

Error Message %PACC-1-UNAVAILABLE: %s (slot %d) %s allocation failure

Explanation The router has failed to allocate sufficient memory for a component of the PA carrier card. This component is displayed after the slot number in the message text.

Recommended Action Show memory summary. Copy the message exactly as it appears on the 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 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.

PACC-3

Error Message %PACC-3-UNAVAILABLE: %s Loss of heartbeat from linecard in slot %d

Explanation The port adapter carrier card has failed to send keepalives (heartbeats) to the Route Processor (RP). The slot number is specified in the error message. This condition usually indicates a software error.

Recommended Action Copy the error message, and any messages preceding this message that may be related to this message, exactly as they appear on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message %PACC-3-UNAVAILABLE: Egress packet parity error on slot %d

Explanation The FPGA on the PA carrier card detected a parity error on an egress frame.

Recommended Action This problem could be caused by either faulty hardware (either the Cisco 7300 or the PA carrier card), by a corrupted FPGA image, or, with a very low likelihood, by software problems. If this occurs frequently, remove and reinsert the PA carrier card. If reseating the card does not fix the problem, a later IOS image may have an updated FPGA bundle that could potentially solve the problem. If this message recurs, do the following: show diag *slot-number*. Copy the message exactly as it appears on the 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 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 %PACC-3-UNAVAILABLE: Egress packet slot ID mismatch on slot %d

Explanation The FPGA on the PA carrier card detected a slot ID mismatch on an egress packet

Recommended Action This problem could be caused by either faulty hardware (either the Cisco 7300 or the PA carrier card), by a corrupted FPGA image, or, with a very low likelihood, by software problems. If this occurs frequently, remove and reinsert the PA carrier card. If reseating the card does not fix the problem, a later IOS image may have an updated FPGA bundle that could potentially solve the problem. If this message recurs, do the following:show diag *slot-number*. Copy the message exactly as it appears on the 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 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 %PACC-3-UNAVAILABLE: Ingress packet parity error on slot %d

Explanation The FPGA on the PA carrier card detected a parity error on an ingress frame.

Recommended Action This problem could be caused by either faulty hardware (either the Cisco 7300 or the PA carrier card), by a corrupted FPGA image, or, with a very low likelihood, by software problems. If this occurs frequently, remove and reinsert the PA carrier card. If reseating the card does not fix the problem, a later IOS image may have an updated FPGA bundle that could potentially solve the problem. If this message recurs, do the following:show diag *slot-number*. Copy the message exactly as it appears on the 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 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 %PACC-3-UNAVAILABLE: No port adapter detected in slot %d

Explanation The port adapter carrier card ROM Monitor has not detected any port adapter plugged into the port adapter carrier card.

Recommended Action Ensure that the port adapter is plugged correctly into the port adapter carrier card

Error Message %PACC-3-UNAVAILABLE: No port adapter type obtained for slot %d

Explanation The port adapter carrier card ROM Monitor has not reported any information about the port adapter that is plugged into the port adapter carrier card. This condition could be caused by either a hardware or a software problem and indicates a communication problem between the ROM monitor for the carrier card and the Cisco 7300.

Recommended Action Remove and reinsert the port adapter carrier card. If this message recurs, do the following: Show dialog *slot-number*). Copy the message exactly as it appears on the 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 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 %PACC-3-UNAVAILABLE: PA-CC FPGA Common Logic egress buffer overflow on slot %d

Explanation The backplane side of the common logic in the FPGA on the PA carrier card has experienced a buffer overflow for egress packets.

Recommended Action This problem could be caused by either faulty hardware (either the Cisco 7300 or the PA carrier card), by a corrupted FPGA image, or, with a very low likelihood, by software problems. If this occurs frequently, remove and reinsert the PA carrier card. If reseating the card does not fix the problem, a later IOS image may have an updated FPGA bundle that could potentially solve the problem. If this message recurs, do the following: Show dialog *slot-number*). Copy the message exactly as it appears on the 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 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 %PACC-3-UNAVAILABLE: PA-CC FPGA Common Logic egress packet error on slot %d

Explanation The backplane side of the common logic in the FPGA on the PA carrier card has experienced an error on an egress packet.

Recommended Action This problem could be caused by either faulty hardware (either the Cisco 7300 or the PA carrier card), by a corrupted FPGA image, or, with a very low likelihood, by software problems. If this occurs frequently, remove and reinsert the PA carrier card. If reseating the card does not fix the problem, a later IOS image may have an updated FPGA bundle that could potentially solve the problem. If this message recurs, do the following: Show dialog *slot-number*). Copy the message exactly as it appears on the 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 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.

Explanation The PA carrier card has detected a packet length error during transmission of an egress packet.

Recommended Action This problem could be caused by either faulty hardware (either the Cisco 7300 or the PA carrier card), by a corrupted FPGA image, or, with a very low likelihood, by software problems. If this occurs frequently, remove and reinsert the PA carrier card. If reseating the card does not fix the problem, a later IOS image may have an updated FPGA bundle that could potentially solve the problem. If this message recurs, do the following: Show dialog *slot-number*). Copy the message exactly as it appears on the 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 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 %PACC-3-UNAVAILABLE: PA-CC FPGA detected an ingress packet length
error on slot %d

Explanation The PA carrier card has detected a packet length error during reception of an ingress packet.

Recommended Action This problem could be caused by either faulty hardware (either the Cisco 7300 or the PA carrier card), by a corrupted FPGA image, or, with a very low likelihood, by software problems. If this occurs frequently, remove and reinsert the PA carrier card. If reseating the card does not fix the problem, a later IOS image may have an updated FPGA bundle that could potentially solve the problem. If this message recurs, do the following: Show dialog *slot-number*). Copy the message exactly as it appears on the 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 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 %PACC-3-UNAVAILABLE: PA-CC FPGA flow control failure from slot %d

Explanation The FPGA on the PA carrier card was unable to generate a flow control frame.

Recommended Action This problem could be caused by either faulty hardware (either the Cisco 7300 or the PA carrier card), by a corrupted FPGA image, or, with a very low likelihood, by software problems. If this occurs frequently, remove and reinsert the PA carrier card. If reseating the card does not fix the problem, a later IOS image may have an updated FPGA bundle that could potentially solve the problem. If this message recurs, do the following: Show dialog *slot-number*). Copy the message exactly as it appears on the 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 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 %PACC-3-UNAVAILABLE: PA-CC FPGA ingress buffer overflow on slot %d

Explanation The FPGA on the PA carrier card detected a failure of hardware flow control for ingress frames.

Recommended Action This problem could be caused by either faulty hardware (either the Cisco 7300 or the PA carrier card), by a corrupted FPGA image, or, with a very low likelihood, by software problems. If this occurs frequently, remove and reinsert the PA carrier card. If reseating the card does not fix the problem, a later IOS image may have an updated FPGA bundle that could potentially solve the problem. If this message recurs, do the following: Show dialog *slot-number*). Copy the message exactly as it appears on the 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 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 %PACC-3-UNAVAILABLE: PA-CC FPGA ingress packet too small error on slot
%d

Explanation The FPGA on the PA carrier card detected a too small packet for an ingress frame from the PA carrier card CPU interface.

Error Message %PACC-3-UNAVAILABLE: PA-CC in slot %d has returned to ROM Monitor: %s

Explanation The PA carrier card in the slot specified in the error message has experienced a system failure and has returned to ROM monitor mode. Additional information in the error message shows the stack trace from the PA carrier card failure.

Recommended Action Show dialog *slot-number*. Copy the message exactly as it appears on the 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 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 %PACC-3-UNAVAILABLE: The PA-CC in slot %d contains a PA with a H/W revision of (%d.%d). The required minimum H/W revision for this PA is (%d.%d).

Explanation The port adapter in the slot specified in the error message has a downlevel hardware revision. A newer hardware revision of the port adapter is required for the PA carrier card to function on the chassis.

Recommended Action Replace the downlevel port adapter with a port adapter of a later hardware revision. The minimum hardware revision is shown in the error message.

Error Message %PACC-3-UNAVAILABLE: Unrecognized port adapter in slot %d

Explanation The port adapter carrier card ROM Monitor has detected a Port adapter but was unable to determine the port adapter type from the port adapter ID PROM

Recommended Action Remove the port adapter carrier card, then remove the port adapter from the line card. Reinsert the port adapter into the line card and ensure that the port adapter is fully inserted. Close the latch on the port adapter carrier card and reinsert the port adapter carrier card into the router. If the problem persists then insert the port adapter into another router (e.g. a c7200, c7400, c7301 or c7500). If the port adapter is not functional in another router, the port adapter needs to be replaced.

Error Message %PACC-3-UNAVAILABLE: Unsupported port adapter (type %d) in slot %d

Explanation An unsupported port adapter of the indicated type has been inserted into the PA carrier card in the slot indicated in the error message.

Recommended Action Replace the port adapter.

PACC_IPC-0

Error Message %PACC_IPC-0-UNAVAILABLE: Cannot create the master seat

Explanation The master IPC seat could not be created. The master seat resides on the Route Processor (RP) and the PA Carrier Card was not able to create an entry to the RP seat. This indicates a communication problem with the RP.

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 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 %PACC_IPC-0-UNAVAILABLE: Doorbell register information incorrect

Explanation A number of parameters are passed to the initialization code through registers known as doorbells. The parameters supplied by the RP are of the incorrect type.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %PACC_IPC-0-UNAVAILABLE: Nothing written to doorbells yet

Explanation The Route Processor (RP) software has not yet written the information needed by the PA Carrier Card startup code. The startup code does not wait for the data and therefore PA Carrier Card could not be 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/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 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.

PACC_1PC_1

Error Message %PACC_IPC-1-UNAVAILABLE: Cannot create IPC port. IPC error %s

Explanation The IPC command port could not be created on the PA Carrier Card. This condition indicates a resource allocation problem in the IPC 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 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 %PACC_IPC-1-UNAVAILABLE: Cannot open event port. IPC error %s

Explanation The IPC port to receive events from the Route Processor could not be opened. The IPC error code is specified at the end of 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/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 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 %PACC_IPC-1-UNAVAILABLE: Cannot register local command port. IPC error
%s

Explanation The IPC local command port could not be registered with the Route Processor. The IPC error code is specified at the end of the error 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. 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 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 %PACC_IPC-1-UNAVAILABLE: Unexpected wakeup event %d. Process: %s

Explanation An unexpected event was received in process only waiting for timer events. This condition indicates 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/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 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 %PACC_IPC-1-UNAVAILABLE: Unrecognised message: %d

Explanation The PA Carrier Card received an unrecognized IPC message. The error message shows the unrecognized command. This condition most likely indicates 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/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 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.

PACC_IPC_3

Error Message %PACC_IPC-3-UNAVAILABLE: Cannot obtain an IPC reply buffer

Explanation The PA Carrier Card could not obtain an IPC message buffer to send a reply back to the Route Processor. This condition indicates a resource allocation problem in the IPC 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 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 %PACC_IPC-3-UNAVAILABLE: Failed to send IPC message. IPC error %s

Explanation An IPC message could not be sent. This condition indicates a resource allocation problem in the IPC 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 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.

PACKET-2

Error Message %PACKET-2-UNAVAILABLE: An attempt to coalesce memory block 0x%8x with its sibling memory block 0x%8x has failed because the sibling block is not valid.

Explanation An attempt to coalesce two memory blocks has failed because a memory block is not valid.

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

 $\label{lem:continuous} \textbf{Error Message} \ \text{%PACKET-2-UNAVAILABLE:} \ \texttt{Client process \%ld} \ \text{attempted to access packet} \\ \text{%x owned by process \%ld}$

Explanation A packet manager client can only access and modify packets that have been assigned to its process

Error Message %PACKET-2-UNAVAILABLE: Client process %ld failed to connect to Packet
Manager (reason %s)

Explanation A packet manager client failed to connect to Packet Manager

Recommended Action Restart the process which could not connect to Packet Manager. Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message PACKET-2-UNAVAILABLE: Client process ld has packet 0x88x, the buffer 0x88x has been corrupted.

Explanation Data has been written past the end of the previous buffer causing memory 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/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 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 %PACKET-2-UNAVAILABLE: Client process %ld has packet 0x%8x, the buffer 0x%8x has been overrun.

Explanation Data has been written past the end of the buffer causing memory to be corrupted.

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 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 %PACKET-2-UNAVAILABLE: Error in creating the shared buffer mem: %s

Explanation Fatal error encountered while creating shared packet buffers

Error Message %PACKET-2-UNAVAILABLE: Error in shm_ctl: %s

Explanation Fatal error encountered while doing the shm_ctl operations on the shared packet memory

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

Error Message %PACKET-2-UNAVAILABLE: Fail to insert client %ld into pak_client_list
at %s

Explanation Can not insert the client into client list queue. This causes the client unable to connect to packet server

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

Error Message %PACKET-2-UNAVAILABLE: Fail to remove client %ld from pak_client_list
at %s

Explanation Can not remove the client from client list queue. This may cause the client fail to reconnect to packet server

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

Error Message %PACKET-2-UNAVAILABLE: Memory block 0x%8x has already been freed.

Explanation An application to the memory block manager has attempted to free or lock a memory block that is not allocated.

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

Error Message %PACKET-2-UNAVAILABLE: Memory block 0x%8x is not valid.

Explanation An application to the memory block manager has passed a memory block that is not valid.

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

Error Message %PACKET-2-UNAVAILABLE: Packet header pool init failed

Explanation Failed to initialize the packet pool headers

Error Message %PACKET-2-UNAVAILABLE: Packet server fails to create a channel and event manager error: %s

Explanation Packet server fails to create an event manager and channel. Clients will be unable to connect to packet server, and packet server will be unable to send and receive messages.

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

Error Message %PACKET-2-UNAVAILABLE: The context information 0x%8x is not valid.

Explanation An application to the memory block manager has passed either a context pointer that is not valid.

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

Error Message %PACKET-2-UNAVAILABLE: The memory block manager has detected an ordinal error. Memory block 0x%8x has an ordinal of 0x%4x and a size of 0x%4x. Its corresponding lower sibling memory block 0x%8x has an ordinal of 0x%4x and a size of 0x%4x.

Explanation The lower sibling ordinal should be equal to the difference between the higher sibling's ordinal and size.

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

Error Message %PACKET-2-UNAVAILABLE: The next block after buffer 0x%8x (packet 0x%8x) has been corrupted.

Explanation Data has been written past the end of the current buffer causing memory to be corrupted.

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

Error Message %PACKET-2-UNAVAILABLE: chunk_create for %s pool failed

Explanation The packet manager encountered a chunk creation failure while creating the packet header chunk

Error Message %PACKET-2-UNAVAILABLE: event attach failure

Explanation The packet subsystem encountered an error when registering for synchronous or asynchronous events.

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

Error Message %PACKET-2-UNAVAILABLE: event_block failure

Explanation event block error was encountered when blocking for external events

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

Error Message %PACKET-2-UNAVAILABLE: event_context_alloc failure

Explanation Failed while allocating the event context

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

Error Message %PACKET-2-UNAVAILABLE: failed to get node name in pakman server init

Explanation packet manager server unable to retrieve the hostname for node/linecard

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

Error Message %PACKET-2-UNAVAILABLE: mutex %s operation on %s in %s failed; reason %s

Explanation Mutex operation failed in the packet server

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

 $\textbf{Error Message} \ \, \texttt{\$PACKET-2-UNAVAILABLE:} \ \, \text{pthread create fail in pakman while creating the \$s thread}$

Explanation packet manager server unable to create a new thread

Error Message %PACKET-2-UNAVAILABLE: pthread_mutex_init failed on packet mutex.
Reason : %s

Explanation The packet manager failed to initialize the global mutex

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

PACKET-3

Explanation Corruption was detected in a memory block, and it was possible to recover the block successfully.

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

Error Message %PACKET-3-UNAVAILABLE: %s

Explanation This is just to report general messages in the memory management code.

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

Error Message %PACKET-3-UNAVAILABLE: %s

Explanation This is just to report general packet header messages.

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

 $\textbf{Error Message} \ \text{%PACKET-3-UNAVAILABLE: \$s Pool \$x corrupted, magic \$x}$

Explanation The packet pool has failed a consistency check as it has got corrupted.

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

Error Message %PACKET-3-UNAVAILABLE: Bad reference count in packet: %p refcount: %d.

Explanation An attempt was made to free a packet that has already been freed

Error Message %PACKET-3-UNAVAILABLE: Corruption in packet header %x, pid %d, magic
%x, buffer %x caller_pc %x

Explanation The packet header has become corrupted.

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

Error Message %PACKET-3-UNAVAILABLE: Handling disconnect for client %d (%s)

Explanation The client id is not found in the previous client list. Remove the client's information from the list of all connected clients.

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

Error Message %PACKET-3-UNAVAILABLE: Intransit flag not set in %d

Explanation A packet being punted across processes does not have the Intransit flag set.

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

Error Message %PACKET-3-UNAVAILABLE: Not able to fix corruption in packet header %x,
pid = %d

Explanation There has been a corruption in the packet header memory and it cannot be fixed.

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

 $\textbf{Error Message} \ \texttt{\$PACKET-3-UNAVAILABLE:} \ \texttt{Packet} \ \texttt{server} \ \texttt{initialization} \ \texttt{failed.} \ \texttt{Reason:} \\ \texttt{\$s}$

Explanation The packet subsystem was not able to initialize properly

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

Error Message %PACKET-3-UNAVAILABLE: Packet server restart failed. Reason : %s

Explanation The packet subsystem was not able to restart properly

Error Message %PACKET-3-UNAVAILABLE: Packet: %p in process: %ld has PAK_INPUTQ set incorrectly

Explanation A packet outside the iosbase has the input queue flag set. This means that a packet was punted from the iosbase to another ION process without decrementing the input queue count

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

Error Message %PACKET-3-UNAVAILABLE: Packet: %p with linktype:%d being punted from
process: %ld to process: %ld with out decrementing the input_qcount

Explanation An attempt was made to punt the packet from one process to another with the input queue flag set. This means that the input_qcount was not decremented on the interface where the packet was received. This will lead to input queue throttling on that interface

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

Error Message %PACKET-3-UNAVAILABLE: Particle packet duplication attempted on non-particle packet

Explanation Duplication of packet with particles routine is called without the packet containing particles.

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

Error Message %PACKET-3-UNAVAILABLE: Restarting %s to reinitialize shared memory because of memory corruption

Explanation There has been a memory corruption. Restart the client to reinitialise shared memory.

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

Error Message %PACKET-3-UNAVAILABLE: Warning(%s) while initializing the packet
process

Explanation The packet subsystem detected some errors while initializing

PAD-2

Error Message %PAD-2-UNAVAILABLE: %s called at interrupt level %x

Explanation An internal software error occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears and report it to your technical support representative.

Error Message %PAD-2-UNAVAILABLE: Tty%t, buffer already setup

Explanation An internal software error occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears and report it to your technical support representative.

PAD-3

Error Message %PAD-3-UNAVAILABLE: Tty%t, bad return code %d from x3_getline()

Explanation An internal software error occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears and report it to your technical support representative.

PAGP_DUAL_ACTIVE Messages

This section contains Port Aggregation Protocol (PAgP) messages.

PAGP_DUAL_ACTIVE-1

Error Message %PAGP_DUAL_ACTIVE-1-RECOVERY: PAgP running on [chars] triggered
dual-active recovery: active id [enet] received, expected [enet]

Explanation PAgP detected that the virtual switches were in a dual-active mode on the specified interface. PAgP caused a switch to go into recovery mode.

Recommended Action No action is required.

PAGP DUAL ACTIVE-3

Error Message %PAGP_DUAL_ACTIVE-3-ADD_TLV_FAIL: Too few bytes for [chars] TLV in PAgP (reqd. [dec], got [dec]) on port [chars]

Explanation The dual-active type-length-value (TLV) could not be added to the PAgP packet due to too few bytes in the packet. PAgP dual-active detection may be disabled as a result.

Recommended Action Enter these commands:

show switch virtual dual-active summary show switch virtual dual-active pagp

Retrieve the PAgP packet contents by entering these commands:

debug condition interface *intfc* debug pagp 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/tac. With 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 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 %PAGP_DUAL ACTIVE-3-OBJECT_CREATE FAILED: Unable to create "[chars]"

Explanation The specified managed object could not be created.

Recommended Action No action is required.

Error Message %PAGP_DUAL_ACTIVE-3-PROC_CREATE_FAILED: Unable to create process
"[chars]"

Explanation The specified process could not be created.

Recommended Action No action is required.

Error Message %PAGP_DUAL_ACTIVE-3-RECOVERY_TRIGGER: PAgP running on [chars]
informing virtual switches of dual-active: new active id [enet], old id [enet]

Explanation PAgP received a new active ID on the specified interface, indicating that the virtual switches are in a dual-active mode. When PAgP notifies the virtual switches, one switch will enter recovery mode.

Recommended Action No action is required.

Error Message %PAGP_DUAL_ACTIVE-3-REGISTRY_ADD_ERR: Failure in adding to [chars]
registry

Explanation A function could not be added to the registry.

Recommended Action No action is required.

PAGP DUAL ACTIVE-4

Error Message %PAGP_DUAL_ACTIVE-4-NO_CHNL_GROUP: Port [chars] channel group not
present while [chars]

Explanation Although the channel group was expected to be present in a link, it could not be extracted. This error may affect functionality, depending on where it occurred. This message indicates a software bug, and should not be seen under normal operation

Recommended Action Enter these commands:

show switch virtual dual-active summary show switch virtual dual-active pagp

Retrieve the PAgP packet contents by entering these commands:

debug condition interface *intfc* debug pagp packet

PAGP_SWITCH_ISSU Messages

This section contains Port Aggregation Protocol (PAgP) switch in-service software upgrade (ISSU) messages.

PAGP_SWITCH_ISSU-3

Error Message %PAGP_SWITCH_ISSU-3-BUFFER: PAGP SWITCH ISSU client failed to get buffer for message, error %d

Explanation The port aggregation protocol (PAgP) switch ISSU client was unable to get buffer space for building a negotiation message. As a result, it cannot send the negotiation message to the standby unit and the standby unit cannot be brought 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/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 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, show logging, and show checkpoint client commands and your pertinent troubleshooting logs.

Error Message %PAGP_SWITCH_ISSU-3-CAPABILITY: PAGP SWITCH ISSU client %s

Explanation During capability negotiation, the PAGP switch ISSU client detected an error that will result in a mismatch in the client capability between the active and standby unit.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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, show logging, show issu capability entries, show issu session, and show issu negotiated capability commands and your pertinent troubleshooting logs.

Error Message %PAGP_SWITCH_ISSU-3-INIT: PAGP SWITCH ISSU client initialization
failed at %s, error %s

Explanation The PAGP switch ISSU client could not be initialized. This condition will cause catastrophic failure when an ISSU upgrade or downgrade is performed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %PAGP_SWITCH_ISSU-3-MSG_NOT_OK: PAGP SWITCH ISSU client message %d is
not compatible

Explanation The PAGP switch ISSU client received an incompatible message from the peer unit. The message cannot be processed by this unit.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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, show logging, show issu message group, show issu session, and show issu negotiated version commands and your pertinent troubleshooting logs.

Error Message %PAGP_SWITCH_ISSU-3-MSG_SIZE: PAGP SWITCH ISSU client failed to get the message size for message %d

Explanation The PAGP switch ISSU client was unable to calculate the message size for the message specified. The client will be unable to send the message to the standby unit.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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, show logging, show issu message group, show issu session, and show issu negotiated version commands and your pertinent troubleshooting logs.

Error Message %PAGP_SWITCH_ISSU-3-POLICY: PAGP SWITCH ISSU client message type %d is
%s

Explanation The PAGP switch ISSU client received a message type that it does not support. A policy is applied to make the session compatible.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 issu session commands and your pertinent troubleshooting logs.

Error Message %PAGP_SWITCH_ISSU-3-SEND_FAILED: PAGP SWITCH ISSU client failed to send a negotiation message, error %d

Explanation The PAGP switch ISSU client could not send a session negotiation message to the peer. As a result, the standby unit cannot be brought 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/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 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, show logging, and show checkpoint client commands and your pertinent troubleshooting logs.

Error Message %PAGP_SWITCH_ISSU-3-SESSION: PAGP_SWITCH ISSU client %s

Explanation The PAGP switch ISSU client detected an error during a session negotiation with the peer unit. As a result, the standby unit cannot be brought 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/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 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, show logging, show issu capability entries, show issu session, and show issu negotiated capability commands and your pertinent troubleshooting logs.

Error Message %PAGP_SWITCH_ISSU-3-SESSION_UNREGISTRY: PAGP SWITCH ISSU client failed
to unregister session information. Error: %d (%s)

Explanation The PAGP switch ISSU client was unable to unregister session information.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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, show logging, show issu session, and show issu negotiated capability commands and your pertinent troubleshooting logs.

Error Message %PAGP_SWITCH_ISSU-3-TRANSFORM: PAGP SWITCH ISSU client %s transform failed, error %s

Explanation The PAGP switch ISSU client could not transform the message. If the transmit transformation failed, the checkpoint message cannot be sent to the standby unit. If the receive transformation failed, the checkpoint message cannot be applied on the standby unit. In either case, the PAGP_SWITCH state will not be identical with the active unit.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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, show logging, show issu session, and show issu negotiated version commands and your pertinent troubleshooting logs.

PARSER Messages

This section contains parser messages.

PARSER-2

Error Message %PARSER-2-UNAVAILABLE: Interrupts disabled in mode %s by command '%s'

Explanation A hardware or software error occurred.

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

PARSER-3

Error Message PARSER-3-BADUNLOCKREQ: Unlock requested by process '[dec]'. You are not the lock owner

Explanation A configuration unlock has been requested by an alien.

Recommended Action Check the code flow for an unwanted configuration unlock request.

Error Message %PARSER-3-CFGLOG_CLI_INITFAILED: Initialization of the Config Log CLI
failed.

Explanation Initialization of the configuration log CLI failed. Configuration logging CLI commands may not be accessible. The configuration logger may not be accessible by using Cisco IOS software CLI 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/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 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 %PARSER-3-CFGLOG_EMPTYCMD: User:[chars]

Explanation The user specified entered an empty command for which a log attempt was made. Normally, empty commands will not be logged.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %PARSER-3-CFGLOG_INCONSISTENT: User:[chars] command:[chars]

Explanation When logging a command entered by CLI, the configuration logger detected an inconsistency in the log. This inconsistency may result in a failure to log the 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/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 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 %PARSER-3-CFGLOG_INITFAILED: Initialization of the Config Log subsystem failed.

Explanation During initialization of the configuration logger subsystem, one or more queues or data structures that are essential to the configuration logger could not be set up. As a result, the configuration logger will not be available for use.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Execute a show version 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/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 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 %PARSER-3-CFGLOG_NOMEM: User:[chars] [chars]

Explanation The command that was entered could not be logged because of a lack of memory. The configuration logger will free old entries one by one until the system logger (syslog) has enough memory to log the command so that an NMS can receive notification of it.

Recommended Action Attempt to free up memory on the router by stopping nonessential processes or unused features that may be running. Once sufficient memory is available, this message no longer appears.

Error Message %PARSER-3-CFGLOG_NOUSER: Command:[chars]

Explanation The user could not be determined while this command was being logged. The command could not be saved in the configuration log.

Recommended Action Copy the error message exactly as it appears. Enter the **show version** command, and copy the displayed information. Determine (if possible) which users are currently logged in to the router, and who was copying configuration files or executing commands in global configuration mode (or via SNMP or HTTP). If you still require assistance, open a case with the Technical Assistance Center 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 %PARSER-3-CFGLOG_PERSIST_APPLY_CMD_FAILED: Configuration logger persistency: Applying config command '[chars]' failed. result '[dec]'.

Explanation When applying the command to the running configuration, the parser returned an error.

Recommended Action Verify that no other process locks the configuration mode during this time. The parser could be locked by the HA or SNMP or by some other process.

Error Message %PARSER-3-CFGLOG_PERSIST_DB_OPEN_FAILED: Configuration logger
persistency: opening persist db failed. File '[chars]'.

Explanation The file open for writing or reading persisted commands has failed.

Recommended Action Check for the file system availability. The file system might have been corrupted. Try formatting the file system.

Error Message %PARSER-3-CFGLOG_PERSIST_FILESYS_FULL: Configuration logger
persistency: Add command to persistent db failed. File system '[chars]' full.

Explanation When logging a CLI command to the configuration logger persistent database, the configuration logger persistency detected zero bytes free in the file system.

Recommended Action Check the space available in the file system. Enter the **dir** *filesystemname*: command to display the free bytes. Clear some space for the configuration logger persistency feature to continue to store the config commands logged in the persistent database.

Error Message %PARSER-3-CFGLOG_PURGEFAILED: Purge config log failed.

Explanation An attempt to purge some of the configuration log entries failed.

Recommended Action Copy the error message exactly as it appears. Execute a show version command, and copy the displayed information. Contact your technical support representative with this information.

Error Message %PARSER-3-CFGLOG_RESIZE_FAILED: Could not resize the config logger to new size:[dec]

Explanation Due to an internal error, a request to resize the configuration log was not carried out. Besides a failure to resize, there should be no change in the behavior of the configuration logger.

Recommended Action Copy the error message exactly as it appears. Enter the **show version** command, and copy the displayed information. Determine (if possible) which users are currently logged in to the router, and who was copying configuration files or executing commands in global configuration mode (or via SNMP or HTTP). If you still require assistance, open a case with the Technical Assistance Center 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 %PARSER-3-CFGLOG_SESSIONERR: Could not delete config log session:[dec] for user:[chars].

Explanation When a user logged out, the configuration logger was unable to clean up information about the user's login session. The result might be a memory leak or an inability to add new commands to the configuration log.

Recommended Action Copy the error message exactly as it appears. Enter the **show version** command, and copy the displayed information. Determine (if possible) which users are currently logged in to the router, and who was copying configuration files or executing commands in global configuration mode (or via SNMP or HTTP). If you still require assistance, open a case with the Technical Assistance Center 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.

 $\textbf{Error Message} \ \text{%PARSER-3-CONFIGNOTLOCKED: Unlock requested by process '[dec]'. } \\ \text{Configuration not locked.}$

Explanation A configuration unlock was requested on a free lock.

Recommended Action Check the code flow for an excess configuration unlock request.

PARSER-4

Error Message %PARSER-4-INVLDSYNTX: Syntax clean up called while not syntax
checking. FuncPtr / Context [chars]

Explanation Functions were mistakenly called. There may be more than those listed.

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 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.

PARSER-5

Error Message %PARSER-5-CFGLOG_LOGGEDCMD: User:[chars] logged command:[chars]

Explanation The configuration logger, which logs every CLI command, has an option to log messages to system logging (syslog). If this option is enabled, this message will be displayed every time a CLI command is processed. This message does not denote any error condition and is a part of the normal operation of the parser and configuration logger.

Recommended Action If you prefer not to see this syslog message, enter the **no cfglog send to syslog** command.

Error Message %PARSER-5-CFGLOG_PERSIST_APPLY_ON_RELOAD: Apply persisted config cmds on reload switched off

Explanation The switch that controls the persisted commands applied during reload is set to off.

Recommended Action From the ROMMON prompt, verify the value of the ROMMON **logpersistreload** variable. This variable might have been intentionally set to off.

PARSER-6

Error Message %PARSER-6-CONFIGLOCKCLEARED: Configuration lock cleared by user
'[chars]' process '[dec]' from terminal '[dec]'

Explanation The configuration lock was cleared using the **clear configuration lock** command.

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

 $\label{locknotsupported} \textbf{Error Message} ~ \texttt{PARSER-6-CONFIGLOCKNOTSUPPORTED: Configuration lock not supported for this transport '[chars]' \\$

Explanation The configuration lock was enabled from a transport other than Telnet or SSH.

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

Error Message %PARSER-6-EXPOSEDLOCKACQUIRED: Exclusive configuration lock acquired
by user '[chars]' from terminal '[dec]'

Explanation An exclusive configuration lock was acquired by the user.

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

Error Message %PARSER-6-EXPOSEDLOCKRELEASED: Exclusive configuration lock released from terminal '[dec]'

Explanation An exclusive configuration lock was released by the user.

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

Error Message %PARSER-6-LI_VIEW_INIT: LI-View initialised.

Explanation A lawful intercept (LI) view was successfully initialized.

Recommended Action No action is required.

Error Message %PARSER-6-SUPER_VIEW_CREATED: super view '%s' successfully created.

Explanation A super view was successfully created and the system has entered the view configuration mode.

Recommended Action No action is required.

Error Message %PARSER-6-SUPER_VIEW_DELETED: super view '%s' successfully deleted.

Explanation A super view was successfully deleted.

Recommended Action No action is required.

Error Message %PARSER-6-SUPER_VIEW_EDIT_ADD: view %s added to superview %s.

Explanation A view was successfully added to the super view. All view related configuration can now be accessed from the super view.

Recommended Action No action is required.

Error Message %PARSER-6-SUPER_VIEW_EDIT_REMOVE: view %s removed from superview %s.

Explanation A view was successfully removed from the super view.

Recommended Action No action is required.

Error Message %PARSER-6-VIEW_CREATED: view '%s' successfully created.

Explanation A view was successfully created and the system has entered the view configuration mode.

Recommended Action No action is required.

Error Message %PARSER-6-VIEW_DELETED: view '%s' successfully deleted.

Explanation The required view was successfully deleted.

Recommended Action No action is required.

Error Message %PARSER-6-VIEW_SWITCH: successfully set to view '%s'.

Explanation The view was successfully selected.

Recommended Action No action is required.

PARSE_RC Messages

This section contains PARSE_RC-related error messages.

PARSE RC-3

Error Message %PARSE_RC-3-PRC_INTERRUPT: [chars]

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 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 %PARSE_RC-3-PRC_INVALID_BLOCK_PTR:

Explanation An internal software 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 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 %PARSE_RC-3-PRC_INVALID_CSB:

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 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 %PARSE_RC-3-PRC_OUT_OF_RANGE_ENUM: [chars] had value [int]

Explanation An out-of-range parameter was passed to an internal 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/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 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 %PARSE_RC-3-PRC_UNRECOGNIZED_ERROR: error value `[dec]' is not
currently mapped

Explanation An unrecognized error was caught and remapped.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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.

PARSE_RC-4

Error Message %PARSE_RC-4-PRC_NON_COMPLIANCE: '[chars]'

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 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.

PARSE_RC-6

Error Message %PARSE_RC-6-PRC_DISABLE: Parser PRC Feature Disabled

Explanation The parser return code (PRC) feature is disabled.

Recommended Action No action is required.

Error Message %PARSE_RC-6-PRC_ENABLE: Parser PRC Feature Enabled. PRC logs are displayed for configration commands alone

Explanation The parser return code (PRC) feature is enabled. PRC logs are displayed for configuration commands alone.

Recommended Action No action is required.

PATCH-3

Error Message %PATCH-3-UNAVAILABLE: Channel mismatch between %s and %s

Explanation Channel mismatch when creating patch.

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.

PBI_OPEN Messages

This section contains programmable binary file data processing (PBI_OPEN) messages.

PBI OPEN-4

Error Message %PBI_OPEN-4-ERROR_ALLOC: %Error: Can't allocate [dec] bytes for pbi
data

Explanation The system is unable to allocate required memory to access the file.

Recommended Action Check the memory usage of the system and retry the operation.

Error Message %PBI_OPEN-4-ERROR_OPEN: %Error: Can't open [chars]

Explanation The system is unable to open the file specified.

Recommended Action Ensure that the filename is correct. Enter the **dir** command to verify the file name.

Error Message %PBI_OPEN-4-ERROR_READ: %Error: pbi file [chars] read failed

Explanation An unknown error has occurred while the system was copying the PBI program file to a local buffer.

Recommended Action The file name is specified in the message by [chars]. Enter the del filename command to remove the file. Use the copy command to recopy the file from a known good source to its desired destination filename. 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 %PBI_OPEN-4-ERROR_SIZE: %Error: Bad file size [chars]

Explanation The file is too small or too large for a PBI program file.

Recommended Action Enter the **dir** command and verify the size of the file. Retry the operation.

PBR Messages

This section contains Policy-Based Routing (PBR) messages.

PBR-2

Error Message %PBR-2-NO_RMAP: Cannot create PBR data structures for route-map
[chars]

Explanation The PBR manager could not allocate the data structures needed to describe a route map being used for policy routing. This condition is probably caused by lack of available memory.

Recommended Action Use a less complicated configuration that requires less memory.

PBR-3

Error Message %PBR-3-INSTALL_FAIL: Policy route-map [chars] not installed in hardware

Explanation The PBR manager was unable to install the complete route map in the hardware, so it will have to be applied in software. This requires the packets to be forwarded by the CPU.

Recommended Action Reconfigure the route map to use a simpler configuration. Use the same route map on multiple interfaces, if possible.

Error Message %PBR-3-MERGE_FAIL: [chars] ACL merge error [dec] on route-map [chars]

Explanation The PBR manager could not complete the merge of the configured route map into a form suitable for loading into the hardware. The most likely cause is specifying an ACL that is too large or too complex for the system to handle.

Recommended Action Try specifying a smaller and less complicated configuration.

Error Message %PBR-3-NO LABEL: Cannot allocate label for route-map [chars]

Explanation The PBR manager could not allocate a label for this route map. This means that the hardware cannot be programmed to implement policy routing. There is a limit of 247 labels for policy routing

Recommended Action Use a less complicated configuration that allows label sharing. Use the same route maps on multiple interfaces, if possible.

Error Message %PBR-3-UNSUPPORTED_RMAP: Route-map [chars] not supported for Policy-Based Routing

Explanation The route map attached to an interface for policy routing contains an action that is not supported on this platform. This is a hardware limitation.

Recommended Action Reconfigure the route map. Use only **permit** entries and **set ip next-hop** actions in the route map.

PBR-4

Error Message %PBR-4-CPU_SUPPORTED_ACTION: Set action in sequence [dec] of route-map [chars] supported by forwarding to CPU

Explanation The route map attached to an interface for policy routing contains an action that is not supported in hardware, such as a **set interface**, **set ip default next-hop**, **set default interface**, or **set ip df** action. Because the action is not supported in hardware, the packets must be forwarded by the CPU.

Recommended Action Reconfigure the route map. Use only **set ip next-hop** in the route map, if possible.

Error Message %PBR-4-RETRY_INSTALL: Route-map [chars] installed in hardware upon retry

Explanation The PBR manager was able to fit the complete configuration into the hardware. One or more route maps had previously not been loaded because of lack of space.

Recommended Action No action is required.

PCIELIB Messages

This section contains The PCI library messages.

PCIELIB-1

Error Message %PCIELIB-1-NULL_RC: The pointer to root complex [[dec]] is NULL.

Explanation The pointer to the specified root complex is NULL.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

PCIELIB-2

Error Message %PCIELIB-2-INSERT_FAILURE: Failed to insert [hex] into [chars] list.

Explanation Failed to insert item into the specified 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. Issue the show tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

Error Message %PCIELIB-2-MMAP_FAILURE: Failed to perform mmap for [chars], errno =
[chars].

Explanation Failed to perform mmap for the specified memory

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

Error Message %PCIELIB-2-NO_JID: Could not get my job id. pid [dec]

Explanation Could not get my job id

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

Error Message %PCIELIB-2-PCIELIB_INIT: Could not initialize PCIE library for process
[dec]

Explanation Could not initialize PCIE library.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

Error Message %PCIELIB-2-REMOVE_FAILURE: Failed to remove [hex] from [chars] list.

Explanation Failed to remove item from the specified 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. Issue the show tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

Error Message %PCIELIB-3-REUSE_LAWBAR: LAWBAR #[dec] is used. orig value = [hex].

Explanation The specified LAWBAR register was used for other purpose.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

PCIELIB-3

Error Message %PCIELIB-3-SHM_OPEN_FAIL: Failed to open shm [chars] errno = [chars].

Explanation Failed to open the specified shared memory.

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 tech-support** 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/cgi-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/launch.do, or contact your Cisco technical support.

PCMCIAFS Messages

This section contains PCMCIA disk messages.

PCMCIAFS-3

Error Message %PCMCIAFS-3-RESETERR: PCMCIA disk [dec] [chars]

Explanation A PCMCIA disk could not be reset while the system was being initialized or reloaded. This condition will cause a transient disk error or disk timeout error when the ROMMON initialization code tries to read the DIB. This is a transient error and the system will be able to access the disk and continue normal operation.

Recommended Action This is an informational message only. No action is required.

PCMCIAFS-4

Error Message %PCMCIAFS-4-DFS_FSCK_ERR: Error while running fsck on the file [chars].

Explanation The fsck process was running in a loop while walking through the cluster chain of a file and has 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/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 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.

PCMCIAFS-5

Error Message %PCMCIAFS-5-UNAVAILABLE: Error during close of the file %s. %s

Explanation An error occurred during a file close operation.

Recommended Action Enter the **fsck** *filesystem prefix:* command to check and attempt to repair the disk. If this does not fix the problem, format the disk.

Error Message %PCMCIAFS-5-UNAVAILABLE: PCMCIA disk %d %s

Explanation The system cannot boot a image from the PCMCIA Flash disk because the Device Information Block is different. The Flash disk can be read by the router, but will require formatting by the router before an image can be booted from it.

Recommended Action Follow any instructions provided in the error message. Before storing a image in the Flash disk and trying to boot from this device, enter the format command to format the flash disk from the router. Then copy the desired image to the Flash disk and then boot from this device.

PERUSER-3

Error Message %PERUSER-3-UNAVAILABLE: %s %s: Can not apply configuration to ISDN channel: %s

Explanation Configuration can not be applied to individual ISDN channels.

Recommended Action You need virtual-profiles and virtual-access interfaces to apply configuration to ISDN. See the section on virtual-profiles in your manual.

PF_ASIC Messages

This section contains protocol filtering messages.

PF ASIC-3

Error Message %PF_ASIC-3-ASIC_DUMP: [[dec]:[hex]] [chars] = [hex]

Explanation This message includes relevant ASIC counters that might help to diagnose the problem with the switching bus.

Recommended Action Copy this message and the SWITCHING_BUS_IDLE message exactly as they appear on the console or in the system log. Contact your Cisco technical support representative with the output. Include this output along with SWITCHING_BUS_IDLE error message.

PF-ETHERCHANNEL Messages

This section contains Policy Feature Card Etherchannel messages.

Error Message %PF_ETHERCHANNEL-3-MLACP_EXTENDED_MISMATCH: An inconstistency was detected between the operational and the configured mlacp-extended mode. Reloading. ([chars])

Explanation This error message is printed if there is an inconsistency between the persistent storage stored mode and the configuration mode. It will be display on the SP on boot-up.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

PGM-3

Error Message %PGM-3-UNAVAILABLE: Failed to allocate %s state

Explanation Resources (memory) for retransmit state are exhausted or otherwise not serviceable.

Recommended Action Manually clear all retransmit state (clear ip pgm router) or deconfigure and reconfigure PGM. Copy the message exactly as it appears on the 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 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 %PGM-3-UNAVAILABLE: Failed to free %s state

Explanation Resources (memory) for retransmit state are not serviceable.

Recommended Action Manually clear all retransmit state (clear ip pgm router) or deconfigure and reconfigure PGM. Copy the message exactly as it appears on the 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 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.

PGM-6

Error Message %PGM-6-UNAVAILABLE: Invalid %s address %i in %s

Explanation Received the packet with invalid address.

Recommended Action LOG_STD_NO_ACTION

Error Message %PGM-6-UNAVAILABLE: Malformed packet: %s

Explanation A PGM packet did not pass the internal sanity check.

Recommended Action LOG_STD_NO_ACTION

Error Message %PGM-6-UNAVAILABLE: Pak for %i received on %i, fixed input interface

Explanation A PGM packet was recieved on an interface other than the one it was addressed to.

Recommended Action LOG_STD_NO_ACTION

Error Message %PGM-6-UNAVAILABLE: TSI group changed from %i to %i

Explanation A PGM SPM advertising a new group for the TSI was processed.

Recommended Action LOG_STD_NO_ACTION

Error Message %PGM-6-UNAVAILABLE: TSI source changed from %i to %i

Explanation A PGM SPM advertising a new source for the TSI was processed.

Recommended Action $LOG_STD_NO_ACTION$

PGMHOST-6

Error Message %PGMHOST-6-UNAVAILABLE: Matched TSI but failed to match dport;
expected %d actual %d

Explanation An incorrectly structured packet has been received from the netwrok.

Recommended Action Investigate and fix the other implementation of PGM.

PG_TCP-3

Error Message %PG_TCP-3-UNAVAILABLE: %s

Explanation Error Messages

Recommended Action Try the debug command.

PFINIT Messages

This section contains platform initialization (PFINIT) messages.

PFINIT-1

Error Message %PFINIT-1-CONFIG_SYNC_FAIL: Sync'ing the [chars] configuration to the standby Router FAILED, the file may be already locked by a command like: show config.

Explanation The active router could not synchronize its configuration with the redundant router. This condition might be a transient one that was caused by the configuration file being temporarily used by another process.

Recommended Action Retry the synchronization operation.

Error Message %PFINIT-1-CONFIG_SYNC_FAIL_RETRY: Sync'ing the [chars] configuration to the standby Router FAILED, the file may be already locked by a command like: show config. Will attempt to sync [dec] more time[chars]

Explanation The active router could not synchronize its configuration with the redundant router. This condition might be a transient one that was caused by the configuration file being temporarily used by another process.

Recommended Action The synchronization operation will be retried the specified number of times.

Error Message %PFINIT-1-CONFIG_SYNC_FAIL_SECONDARY_SYNC_RETRY: Sync'ing the [chars]
configuration to the standby Router FAILED with error: [chars] ([dec]).Will
attempt to sync [dec] more time[chars]

Explanation The active router could not synchronize its configuration with the redundant router. This condition might be a transient one that was caused by the configuration file being temporarily used by another process.

Recommended Action Retry the synchronization operation.

Error Message %PFINIT-1-CONFIG_SYNC_SIZE_NULL: Active config file is empty. No sync of the [chars] configuration file required.

Explanation The configuration of the active switch was not synchronized with the standby switch because the configuration file of the active switch is empty. This condition might have been the result of the user entering a **write erase** command on the active router prior to synchronization between the active and standby switches.

Recommended Action If the empty configuration file was the result of user-entered CLI, no action is required. If this was an unexpected condition, copy the message exactly as it appears on the 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 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.

PFINIT-2

Error Message %PFINIT-2-IPCSEAT: Unable to add/remove IPC seats for %s

Explanation The platform initialization subsystem could not add or remove interprocess communication (IPC) elements (seats).

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 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.

PFINIT-4

Error Message %PFINIT-4-IPC_ICC_INIT_FAIL: Failed to [chars]

Explanation The PF subsystem failed to initialize some IPC/ICC information.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

PFINIT-5

Error Message %PFINIT-5-CONFIG_SYNC_NOT_SUPPORTED: Sync'ing the [chars] configuration to the standby Router is not supported.

Explanation The configuration has not been successfully synchronized with the standby router. [chars] is the configuration name.

Recommended Action No action is required.

PFINIT-6

Error Message %PFINIT-6-ACTIVE_NON_VS: Active supervisor is in standalone mode, but SWITCH_NUMBER rommon variable set on the standby or standby having vsl config.Setting SWITCH_NUMBER variable in rommon to 0 and resetting the standby.

Explanation The active supervisor is up in standalone mode while standby'srommon has SWITCH_NUMBER set. Clearing SWITCH_NUMBER rommon variable and resetting the standby

Recommended Action This is an informational message. No action is required.

PF_ISSU Messages

This section contains high availability platform in-service software upgrade (ISSU) infrastructure messages.

PF ISSU-3

Error Message %PF_ISSU-3-ISSU_NEGO_LC_RESET: ISSU negotiation failed between
endpoint %d and line card %d, for ISSU client %d

Explanation ISSU negotiation failed between an endpoint and a line card. The line card must be 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/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 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 issu sessions commands and your pertinent troubleshooting logs.

PF_OBFL Messages

This section contains platform on-board failure logging (OBFL) messages.

PF OBFL-5

Error Message %PF_OBFL-5-FEATURE: Platform OBFL [chars] feature initialization fails
in slot [dec].

Explanation The PF subsystem could not initialize the on-board failure logging (OBFL) feature specified by [chars].

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %PF_OBFL-5-STORAGE: Platform OBFL storage ([chars]) initialization fails in slot [dec].

Explanation The PF subsystem could not initialize on-board failure logging (OBFL) storage flash.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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.

PF_PRST_VBL Messages

This section contains platform persistent variable messages.

PF PRST VBL-3

Error Message %PF_PRST_VBL-3-MEDIA: PF persistent variable media error: %s

Explanation A media error was detected with the persistent variable PF 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 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.

PFREDUN Messages

This section contains Policy Feature Card Redundancy (PFREDUN) messages.

PFREDUN-1

Error Message %PFREDUN-1-VTP_CONFIG_DISLOCATE: VTP config file must be in default location for standby supervisor to come online

Explanation The redundant supervisor engine failed to come online because the VTP configuration file is not in the default location.

Recommended Action Reset the redundant supervisor engine, and then configure the VTP configuration file so that it is in the default location.

PFREDUN-3

Error Message %PFREDUN-3-ACTIVE_FORCED_TO_RELOAD: Active not able to operate properly. Standby is ready to take over and forced active to reload.

Explanation The active supervisor engine is not operating properly. It is failing to respond. The standby supervisor engine is ready to take over and forces the active supervisor engine to reload.

Recommended Action If the active does not reload successfully, copy the message exactly as it appears on the 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 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 %PFREDUN-3-CCMODE_MISMATCH: Standby Supervisor cannot support
Configured Card Mode [chars]([hex]) due to [chars](enf mask [hex], cap mask [hex],
msg ver [hex])!

Explanation The active supervisor engine is in user-configured mode (for example, DFC-only mode). The active supervisor engine attempts to bring the standby supervisor engine on line, but incompatible software on the standby cannot support this mode The active keeps the standby in ROMMON mode.

Recommended Action Remove the user-configured mode on the active supervisor engine so that the active can bring the standby on line.

Error Message %PFREDUN-3-STANDBY_OUT_OF_SYNC: Active and Standby are out of sync.

Explanation The active supervisor engine and standby supervisor engine are out of synchronization. This condition may be due to communication failure, configuration synchronization failure, or another cause.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %PFREDUN-3-SUP: [chars]

Explanation The supervisor engine failed to boot because it detected that the system might contain an invalid combination of supervisor engines.

Recommended Action Examine all modules in the system, and look for an invalid combination of supervisor engines.

PFREDUN-4

Error Message %PFREDUN-4-AUTOBOOT: [chars]

Explanation The RP experienced a hardware failure or another type of failure. When the redundant system initializes, the redundant supervisor will wait for the RP to initialize. Because the RP cannot initialize due to the failure, the redundant supervisor engine might never initialize. The default wait time for the RP to initialize (three minutes) has now expired, and the autoboot feature for the supervisor engine has been 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/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 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.

Explanation The bootfile that is configured is not present on the redundant supervisor engine. If the redundant supervisor engine resets, it will not come up because it will not find the image specified in the bootstring.

Recommended Action No action is required.

Error Message %PFREDUN-4-EARL_MISMATCH_4SUP: In-Chassis Standby being disabled
([chars])

Explanation This message indicates that there is an Earl mode mismatch between the In-Chassis Active and the In-Chassis Standby and hence In-Chassis Standby is being disabled.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

Error Message %PFREDUN-4-INCOMPATIBLE: Defaulting to RPR mode (%s)

Explanation A runtime incompatibility exists between image versions running on the active and standby supervisors. The redundancy mode will default to route processor redundancy (RPR).

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %PFREDUN-4-PFC_MISMATCH: My PFC [chars] and Other's PCF [chars]
mismatch

Explanation The active supervisor engine and the redundant supervisor engine have different versions of the PFC daughter 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 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 %PFREDUN-4-PFC_MISMATCH_4SUP: In-Chassis Active PFC is [chars]
In-Chassis Standby PFC is [chars]

Explanation This message indicates that the In-Chassis Active and the In-Chassis Standby have different versions of the PFC.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

Error Message %PFREDUN-4-PHYSMEM_MISMATCH: Asymmetrical redundant configuration:
Active [chars] has ([int]/[int]K) memory, Standby has ([int]/[int]K).

Explanation To support the high availability feature, we recommend that your redundant supervisor engines have symmetrical memory configurations.

Recommended Action Upgrade the memory on the supervisor engine with less memory to match the amount of memory on the other supervisor engine.

Error Message %PFREDUN-4-SUP_FORCE_TO_ROMMON: Supervisor forced to rommon with reason: [chars]

Explanation An application forced the supervisor engine to stay in ROMMON mode with the reason given.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %PFREDUN-4-SUP_OS: The peer supervisor is running a different operating system.

Explanation The active supervisor engine is in user-configured mode (for example, DFC-only mode). The active supervisor engine attempts to bring the standby supervisor engine on line, but incompatible software on the standby supervisor engine cannot support this mode. The active supervisor engine keeps the standby supervisor engine in ROMMON mode.

Recommended Action Remove the user-configured mode on the active supervisor engine so that the active supervisor engine can bring the standby supervisor engine on line, or insert a supervisor engine that runs the same operating system as that of the peer supervisor engine.

Error Message %PFREDUN-4-VERSION_MISMATCH: Defaulting to RPR mode ([chars])

Explanation There is a mismatch of image versions running on the active supervisor engine and on the redundant supervisor engine.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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.

PFREDUN-6

Error Message %PFREDUN-6-Z_COOKIE: [chars]

Explanation Informational messages regarding the presence of z-switchover cookie

Recommended Action No action is required.

PFREDUN-7

Error Message %PFREDUN-7-KPA_WARN: RF KPA messages have not been heard for [dec]
seconds

Explanation The RF KPA messages have not been sent from the peer for the specified numbers of seconds. This message is printed after every third KPA timer expiry.

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 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.

PFREDUN_SP Messages

This section contains Policy Feature Card Redundancy (PFREDUN) switch processor (SP) messages.

PFREDUN_SP-3

Error Message %PFREDUN_SP-3-DIVC_MODE_CHANGE: Redundancy mode changed to RPR

Explanation The redundancy mode has changed from stateful switchover (SSO) to route processor redundancy (RPR) because one or more base ISSU clients have failed to successfully negotiate an ISSU session.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %PFREDUN_SP-3-DIVC_MODE_CHANGE_RESET: Redundancy mode changed to RPR,
standby supervisor being reset

Explanation The redundancy mode has changed from SSO to RPR because one or more base ISSU clients have failed to successfully negotiate an ISSU session. The standby supervisor is being reset and will come up in RPR mode.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %PFREDUN_SP-3-STANDBY_NEGO_FAILED: Session not negotiated, resetting
the standby sup

Explanation Both the active and standby supervisors are ISSU capable but the standby failed to negotiate its platform redundancy ISSU session. The standby supervisor must be 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/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 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.

PHY Messages

This section contains physical layer messages.

PHY-4

Error Message %PHY-4-CHECK_SUM_FAILED: SFP EEPROM data check sum failed for SFP
interface [chars]

Explanation The SFP was identified as a Cisco SFP, but the system was unable to read vendor data information to verify its correctness.

Recommended Action Remove and reinsert the SFP. If it fails again in the same way, the SFP may be defective.

Error Message %PHY-4-EXCESSIVE_ERRORS: Excessive FCS, data, or idle word errors found on interface [chars]

Explanation The system has detected excessive FCS, data word, or idle word errors on the specified interface.

Recommended Action Enter the **show interface** command on the specified interface and check for CRC and other input errors. If errors are excessive, enter the **shut** command followed by the **no shut** command to reset the interface.

PIM Messages

This section contains Protocol Independent Multicast (PIM) messages.

PIM-1

Error Message %PIM-1-INVALID_RP_REG: Received Register from router %i for group %i,
%i not willing to be RP

Explanation A PIM router received a register message from another PIM router that thinks it is the rendezvous point. If the router is not configured for another rendezvous point, it will not accept the register message.

Recommended Action Configure all leaf routers (first-hop routers to multicast sources) with the IP address of the valid rendezvous point.

Error Message %PIM-1-SR_INTERVAL_SETTING_ERR: Incompatible SR interval from %i on %s
(%d != %d)

Explanation A state-refresh capable PIM neighbor on this interface has a different setting for the state-refresh origination interval.

Recommended Action Configure all PIM routers connected to this LAN to use the same state-refresh origination interval for their interfaces on the LAN.

PIM-3

Error Message %PIM-3-MVRF_NULL_PRM: Null parameter specified for MVRF lookup.

Explanation A function to perform a Multicast Virtual Route Forwarding (MVRF) lookup by name detected a NULL input parameter. The intended action cannot proceed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %PIM-3-RPDF_NULL_PRM: Null parameter specified for Bidir RP DF
creation.

Explanation A function to create a bidirectional route processor (RP) designated forwarder (DF) entry detected a NULL input parameter. The RP DF entry cannot be created.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %PIM-3-UPD_RPR_NULL_PRM: Null parameter specified for Bidir RP route
update.

Explanation A function to perform an update of the bidirectional RP route information detected a NULL input parameter. The update cannot proceed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %PIM-3-UNAVAILABLE: For multicast route (%i, %i), no register tunnel
IDB found for RP %i

Explanation During an attempt to install or uninstall a register tunnel interface for an S,G multicast route, the register tunnel entry for the corresponding RP did not specify a tunnel interface. The register tunnel interface can not be added to or removed from the multicast route.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PIM-3-UNAVAILABLE: For multicast route (%i, %i), no register tunnel
found for RP %i

Explanation During an attempt to install a register tunnel interface for a new S,G multicast route, a search in the PIM register encapsulation tunnel list failed to find the tunnel entry for the corresponding RP. The register tunnel interface can not be added to the multicast route.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PIM-3-UNAVAILABLE: Invalid parameter passed while walking the autorp cache to find a group-to-rp mapping for Sparse RP %i. parameter: 0x%x

Explanation An invalid parameter was specified while walking the autorp cache to find a Sparse RP match.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PIM-3-UNAVAILABLE: Managed timer wakeup received by the PIM register tunnel creation process with no expired timers.

Explanation The PIM register tunnel creation process received a wakeup for managed timer expiration, but the API to obtain the first expired timer returned a NULL pointer. The timer expiration can not be handled. Possible loss of PIM register tunnel functionality, including failure of PIM Sparse Mode registration for some multicast groups, may occur as a result.

Error Message %PIM-3-UNAVAILABLE: NULL RP pointer specified for PIM register tunnel
creation.

Explanation The caller passed a NULL pointer instead of providing a valid pointer to the RP cache entry for which register tunnel creation was requested. The encapsulation or decapsulation tunnel can not be created.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PIM-3-UNAVAILABLE: NULL mvrf specified in PIM register tunnel creation request for RP %i

Explanation An NULL mvrf was specified for creation of a PIM register tunnel associated with the specified RP. The register tunnel can not be created.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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.

Explanation An NULL mvrf was specified for the PIM register tunnel associated with the specified RP. The register tunnel can not be used for registration.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PIM-3-UNAVAILABLE: NULL mvrf specified in RP mapping notification for RP %i

Explanation An NULL mvrf was specified when a PIM RP mapping notification was made.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PIM-3-UNAVAILABLE: No register tunnel IDB found for RP %i. Can't
execute pending delete

Explanation During an attempt to delete a register tunnel interface that is currently in use for at least one mroute olist entry, the register tunnel entry did not specify a tunnel interface. The register tunnel interface can not be deleted.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PIM-3-UNAVAILABLE: Null parameter specified for Bidir RP DF creation.

Explanation A function to create a Bidir RP DF entry detected a NULL input parameter. The RP DF entry can not be created.

Error Message %PIM-3-UNAVAILABLE: Null parameter specified for Bidir RP route update.

Explanation A function to perform an update of Bidir RP route information detected a NULL input parameter. The update can not proceed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PIM-3-UNAVAILABLE: Null parameter specified for MVRF lookup.

Explanation A function to perform an mvrf lookup by name detected a NULL inputparameter. The intended action can not proceed.

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 %PIM-3-UNAVAILABLE: Process enqueue for %s register tunnel creation failed for RP %i.

Explanation An attempt to enqueue a request for PIM register tunnel IDB creation failed (probably because of a lack of resources). The encapsulation or decapsulation tunnel can not be created.

Error Message %PIM-3-UNAVAILABLE: Register tunnel MDB client flag allocation failed.

Explanation An attempt to allocate a client flag position for use in tracking the number of mroutes using each PIM register tunnel has failed. Register tunnels can be allocated, but can not deleted.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PIM-3-UNAVAILABLE: Tunnel IDB creation for a PIM register %s tunnel for RP %i failed.

Explanation An attempt to create a tunnel IDB for use with a PIM register tunnel has failed. The encapsulation or decapsulation tunnel can not be created.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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.

PIM-4

Error Message %PIM-4-DEPRECATED_HELLO_TLV: Deprecated PIM Hello Option TLV %d (%s)
from %i (%s)

Explanation A PIM neighbor is running old software that uses deprecated Hello Option TLVs. Unless the router is upgraded, DR priority and bidirectional groups may not function properly.

Recommended Action Upgrade the routers.

Explanation A PIM router configured as a rendezvous point received a register message from another PIM router, but the source of the multicast data is disallowed in this RP.

Recommended Action No action is required.

PIM-5

Error Message %PIM-5-DRCHG: DR change from neighbor [IP_address] to [IP_address] on interface [chars] (vrf [chars])

Explanation A PIM neighbor is the new DR on an interface.

Recommended Action This is an informational message only. No action is required.

Error Message %PIM-5-NBRCHG: neighbor [IP_address] [chars] on interface [chars] (vrf
[chars]) [chars]

Explanation A PIM neighbor has gone up or down on the specified interface.

Recommended Action This is an informational message only. No action is required.

Error Message %PIM-5-PROXY: Deny proxy for ([IP_address], [IP_address]) from neighbor [IP_address]

Explanation A PIM proxy from the specified neighbor was denied.

Recommended Action No action is required.

PIM-6

Error Message %PIM-6-INVALID_RP_JOIN: Received (*, %i) Join from %i for invalid RP %i

Explanation A downstream PIM router sent a join message for the shared tree, which this router does not want to accept. This behavior indicates that this router will allow only downstream routers join to a specific rendezvous point.

Recommended Action Configure all downstream leaf routers to join to the RP that is allowed by upstream routers toward the validated rendezvous point.

```
Error Message %PIM-6-REG_ENCAP_INVALID: Bad register from %i for (%i, %i);
additional info = %x %x %x %x %x %x %x %x
```

Explanation A PIM router configured as a rendezvous point or with network address translation (NAT) received a PIM register packet from another PIM router. The data encapsulated in this packet is invalid.

Recommended Action No action is required.

```
Error Message %PIM-6-SA_ENCAP_INVALID: Bad SA from RP %i for (%i, %i); additional
info = %x %x %x %x %x %x %x %x
```

Explanation A PIM router configured as an MSDP peer received an SA with encapsulated data. The data encapsulated in this packet is invalid.

Recommended Action No action is required.

PIM_PROT Messages

This section contains Protocol Independent Multicast (PIM) protocol messages.

PIM_PROT-3

```
Error Message %PIM_PROT-3-MSG_SEND_ERR: [chars]
```

Explanation An internal error occurred while trying to send a message. Events scheduled to happen on reception of the message, such as deletion of the PIM tunnel IDB, may not take place.

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.

PIM PROT-4

```
Error Message %PIM_PROT-4-PROTOCOL_WARNING: [chars] - [chars] : [chars]
```

Explanation Internal protocol inconsistency warning

Recommended Action No action is required.

PIM PROT-6

Error Message %PIM_PROT-6-IDB_ENABLE: Interface [chars] does not support multicast,
not enabled

Explanation PIM is not enabled on an interface that does not support multicast.

Recommended Action This is an informational message only. No action is required.

PIM_PROT-7

Error Message %PIM_PROT-7-INTERNAL_ERR: [chars]

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/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.

PIMSN Messages

This section contains Protocol Independent Multicast (PIM) Snooping (PIMSN) messages.

PIMSN-6

Error Message %PIMSN-6-IGMPSN_GLOBAL: PIM Snooping global runtime mode [chars] due to IGMP Snooping [chars]

Explanation PIM snooping requires that IGMP snooping be enabled. When IGMP snooping is disabled, PIM snooping also becomes disabled. PIM snooping is reenabled when IGMP snooping is reenabled.

Recommended Action No action is required. The system is working properly. We recommend that you leave IGMP snooping enabled.

Error Message %PIMSN-6-IGMPSN_VLAN: PIM Snooping runtime mode on vlan [dec] [chars]
due to IGMP Snooping [chars]

Explanation PIM snooping requires that IGMP snooping be enabled. When IGMP snooping is disabled, PIM snooping also becomes disabled. PIM snooping is reenabled when IGMP snooping is reenabled.

Recommended Action No action is required. The system is working properly. We recommend that you leave IGMP snooping enabled.

PIM REG TUN

Error Message %PIM_REG_TUN-3-UNAVAILABLE: Failed to configure service policy on register tunnel.

Explanation When the ip pim register-rate-limit CLI command is entered, a rate-limiting policy-map is created. This policy-map is attached to each register tunnel by configuring an output service policy on the tunnel. This message is logged as a result of a failure to configure an output service policy on a register tunnel. This failure may be due to lack of temporary resources, but it may also be caused by platform restrictions on overlapping QoS configurations such as simultaneously having a service policy on a tunnel and on the real interface associated with the tunnel.

Recommended Action LOG_STD_NO_ACTION

Error Message %PIM_REG_TUN-3-UNAVAILABLE: Failed to set un-numbered interface for %s
(%s)

Explanation The PIM tunnel is not usable without a source address. This can happen because we couldn't find a numbered interface or due to some internal error

Recommended Action Manually unconfigure the PIM-SM RP and re-configure it. Copy the message exactly as it appears on the 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 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 %PIM_REG_TUN-3-UNAVAILABLE: Lookup of rate-limit policymap %s failed

Explanation When the ip pim register-rate-limit CLI command is entered, a rate-limiting policy-map is created. This policy-map is attached to each register tunnel by configuring an output service policy on the tunnel. A policy-map lookup is therefore performed whenever the register-rate-limit command is enabled or disabled. This message is logged as a result of a lookup 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 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 %PIM_REG_TUN-3-UNAVAILABLE: Unexpected tunnel transport: %u.

Explanation An unexpected tunnel transport was detected. The location where the value was detected and the execution path that lead to it may be obtained from the traceback included in this 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 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.

PKI Messages

This section contains public key infrastructure (PKI) feature messages.

PKI-3

Error Message %PKI-3-CERTIFICATE_INVALID: Certificate chain validation has failed.

Explanation The certificate is not valid.

Recommended Action Verify that the system clock is set correctly.

Error Message %PKI-3-CERTIFICATE_INVALID_EXPIRED: Certificate chain validation has
failed. The certificate (SN: [chars]) has expired. Validity period ended on
[chars]

Explanation The certificate validity period indicates that this certificate has expired.

Recommended Action Verify that the system clock is set correctly.

Error Message %PKI-3-CERTIFICATE_INVALID_NOT_YET_VALID: Certificate chain
validation has failed. The certificate (SN: [chars]) is not yet valid Validity
period starts on [chars]

Explanation The certificate validity period indicates that this certificate is not yet valid

Recommended Action Verify that the system clock is set correctly.

Error Message %PKI-3-CERTIFICATE_INVALID_UNAUTHORIZED: Certificate chain validation has failed. Unauthorized

Explanation The certificate is valid but not authorized

Recommended Action Verify that the system clock is set correctly.

Error Message %PKI-3-CERTIFICATE_REVOKED: Certificate chain validation has failed.
The certificate (SN: [chars]) is revoked

Explanation The certificate has been revoked by the CA administrator.

Recommended Action Contact the CA administrator to check the status of the certificate.

Error Message %PKI-3-CERTRETFAIL: Certificate enrollment failed.

Explanation A certificate enrollment transaction failed due to internal error.

Recommended Action Contact the CE or copy the message exactly as it appears on the 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 %PKI-3-CS_CRIT_STORAGE: Critical certificate storage, [chars], is
inaccessible, server disabled.

Explanation The critical certificate storage location is inaccessible, so the server is disabled.

Recommended Action Make the storage location accessible or reconfigure the storage location.

Error Message %PKI-3-GETCARACERT: Failed to receive RA/CA certificates.

Explanation A failure was encountered while CA or RA certificates were being parsed or processed.

Recommended Action Check the status of the certificate or contact the CA administrator.

Error Message %PKI-3-INVALIDCACERT: Failed to process CA certificate.

Explanation The CA certificate that was received from the CA server could not be processed.

Recommended Action Enter the **parser** command.

Error Message %PKI-3-INVALID_INPUT: The input to the parser command is not correct

Explanation The arguments supplied to the **parser** command are not correct.

Recommended Action Reenter the command.

Error Message %PKI-3-POLLCACERT: Polling CA certificate

Explanation The CA certificate is being polled.

Recommended Action Check to see if the CA server or the LDAP server is on line.

Error Message %PKI-3-POLLRACERT: Polling RA certificate

Explanation The RA certificate is being polled.

Recommended Action Check to see if the CA server or the LDAP server is on line.

Error Message %PKI-3-POLLROUTERCERT: Polling Router certificate

Explanation The router certificate is being polled.

Recommended Action Check to see if the CA server or the LDAP server is on line.

Error Message %PKI-3-QUERYCACERT: Failed to query CA certificate.

Explanation A CA certificate from the CA server could not be queried.

Explanation Enter the **parser** command.

Error Message %PKI-3-QUERY_KEY: Querying key pair failed.

Explanation A public key or private key query attempt using the subject name has failed.

Explanation Resubmit the enrollment request. Check the subject name.

Error Message %PKI-3-SOCKETSELECT: Failed to select the socket.

Explanation The socket could not be selected.

Explanation Check for a TCP of socket debugging message to attempt to investigate the problem.

Error Message %PKI-3-SOCKETSEND: Failed to send out message to CA server.

Explanation A message could not be sent to the CA server. This failure is caused by a problem with the HTTP transaction.

Explanation Check the HTTP connection to the CA server.

PKI-4

 ${\bf Error\; Message}\; {\tt \$PKI-4-CRL_LDAP_QUERY:}$ The CRL could not be retrieved from the specified LDAP server

Explanation The certificate revocation list (CRL) is located on an LDAP server but the LDAP query failed.

Recommended Action Check that the LDAP server is reachable and online. Verify that the CRL is at the specified location.

Error Message %PKI-4-CS_PUBLISH_STORAGE: Publish certificate storage, [chars], is inaccessible.

Explanation The publish certificate storage location is inaccessible.

Recommended Action Make the storage location accessible or reconfigure the storage location.

Error Message %PKI-4-NOAUTOSAVE: Configuration was modified. Issue "write memory" to save new certificate

Explanation Auto-enroll has obtained a new router key pair and certificate. However, the running configuration was previously modified.

Recommended Action Enter the **write memory** command to save the new certificate(s) and key(s).

Explanation The PKI process has generated a new PKI configuration, but the running configuration was previously modified.

Recommended Action Enter a write memory command to save the new PKI configuration.

Error Message %PKI-4-NOSHADOWAUTOSAVE: Configuration was modified. Issue "write memory" to save new IOS CA certificate

Explanation Cisco IOS CA Rollover has generated a shadow CA key pair and certificate. However, the running configuration was previously modified.

Recommended Action Enter the **write memory** command to save the new certificates and keys.

PKI-6

Error Message %PKI-6-AUTOENROLL_KEY_LOCKED: Auto-enroll failed - RSA keypair is locked

Explanation Auto-enroll could not generate a new RSA key pair because the existing RSA key pair is locked.

Recommended Action Auto-enroll will retry the enrollment request. Make sure that the existing RSA key pair is unlocked before the next retry.

 $\textbf{Error Message} \ \ \texttt{\$PKI-6-AUTOSAVE:} \ \ \textbf{Running configuration saved to NVRAM}$

Explanation Auto-enroll has obtained a new router key pair and certificate, and has done an automatic write to memory to save them.

Recommended Action This is an informational message only. No action is required.

Error Message %PKI-6-CERTFAIL: Certificate enrollment failed.

Explanation A fatal error was encountered during a certificate enrollment operation.

Recommended Action Contact the CA administrator.

Error Message %PKI-6-CERT_FATAL_ERR: [chars]

Explanation A fatal error was encountered during a certificate enrollment operation. The operation has been terminated.

Recommended Action Contact the CA administrator.

Error Message %PKI-6-CERTIFSRECV: Could not receive router's Certificate from file system.

Explanation The certificate for the router could not be received from the file system.

Recommended Action Verify the enrollment URL and that the router is able to read from the file system.

Error Message %PKI-6-CERTIFSSEND: Could not send Certificate enrollment request to file system.

Explanation The certificate enrollment request could not be sent to the file system.

Recommended Action Verify the enrollment URL and that the router is able to write to the file system.

Error Message %PKI-6-CERTPENDING: Enter manual authentication ...

Explanation The CA server is attempting to manually authenticate the router.

Recommended Action Follow the manual authentication procedure.

Error Message %PKI-6-CERTREJECT: Certificate enrollment request was rejected by Certificate Authority

Explanation A previous certificate enrollment request was received by the Certificate Authority. The CA has rejected the enrollment request.

Recommended Action Contact the Certificate Authority administrator.

Error Message %PKI-6-CERTRET: Certificate received from Certificate Authority

Explanation A previous certificate enrollment request was received by the Certificate Authority. The CA has issued the certificate and sent back a copy

Recommended Action No action is required.

Error Message %PKI-6-CONFIGAUTOSAVE: Running configuration saved to NVRAM

Explanation The PKI process has generated and saved to memory a new PKI configuration.

Recommended Action No action is required.

Error Message %PKI-6-CS_DELETE: Certificate Server is deleted.

Explanation The certificate server is deleted.

Recommended Action No action is required. This is an informational message.

Error Message %PKI-6-CS_DELETE_TP_KEY: Trustpoint and key deleted.

Explanation The trustpoint and key used by the certificate server are deleted.

Recommended Action No action is required. This is an informational message.

Error Message %PKI-6-CS_GRANT_AUTO: All enrollment requests will be automatically granted.

Explanation All enrollment requests will be automatically granted.

Recommended Action No action is required. This is an informational message.

Error Message %PKI-6-CS_GRANT_AUTO_CACERT: All rollover subordinate CA cert requests will be automatically granted.

Explanation All rollover subordinate CA certificate requests will be automatically granted.

Recommended Action No action is required. This is an informational message.

Error Message %PKI-6-CS_GRANT_AUTO_RA: Enrollment requests coming from known RAs will be automatically granted.

Explanation Enrollment requests coming from known RAs will be automatically granted.

Recommended Action No action is required. This is an informational message.

Error Message %PKI-6-CS_GRANT_AUTO_RACERT: All rollover RA cert requests will be automatically granted.

Explanation All rollover RA certificate requests will be automatically granted.

Recommended Action No action is required. This is an informational message.

Error Message %PKI-6-CS_REJECT_AUTO: All enrollment requests will be automatically rejected.

Explanation All enrollment requests will be automatically rejected.

Recommended Action No action is required. This is an informational message.

Error Message %PKI-6-PKCS12EXPORT_FAIL: PKCS #12 Export Failed.

Explanation An attempt to generate and export information conforming to the PKCS #12 format has failed.

Recommended Action This is an informational message only. No action is required.

Error Message %PKI-6-PKCS12EXPORT_SUCCESS: PKCS #12 Successfully Exported.

Explanation Information conforming to the PKCS #12 format has been generated and successfully exported.

Recommended Action This is an informational message only. No action is required.

Error Message %PKI-6-PKCS12IMPORT_FAIL: PKCS #12 Import Failed.

Explanation An attempt to import information conforming to the PKCS #12 format has failed.

Recommended Action This is an informational message only. No action is required.

Error Message %PKI-6-PKCS12IMPORT_SUCCESS: PKCS #12 Successfully Imported.

Explanation Information conforming to the PKCS #12 format has been successfully imported.

Recommended Action This is an informational message only. No action is required.

Error Message %PKI-6-SHADOWAUTOSAVE: Running configuration saved to NVRAM

Explanation Cisco IOS CA Rollover has generated a shadow CA key pair and certificate, and has executed an automatic **write memory** command to save them.

Recommended Action No action is required. This is an informational message.

PLATFORM Messages

This section contains platform-specific messages.

PLATFORM-1

Error Message %PLATFORM-1-CRASHED: [chars]

Explanation The system is attempting to display the crash message from the previous crash.

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 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.

PLATFORM-3

Error Message %PLATFORM-3-FATALCINNAMON: The FPGA controller has received a fatal
interrupt, reg=[hex], mask=[hex], config=[hex] - [chars]

Explanation The FPGA controller has received a fatal interrupt. This may be a hardware or 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/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 %PLATFORM-3-NO_HARDWARE_RESOURCES: Not enough hardware resources. Shutting down [chars]

Explanation There are too many VLANs and routed ports on the system.

Recommended Action Reduce the total number of VLANs and routed ports to be fewer than 1023. If you require this configuration and connectivity to be maintained across system reboots, save the configuration to NVRAM.

Error Message %PLATFORM-3-PW_REC_HRPC_BAD_LENGTH: Received incompatible length
(=[dec]) in set-password-recovery HRPC message from box [dec].

Explanation The system has received an incompatible length parameter in a set-password-recovery HRPC message. This condition could be caused by a stack that is operating with incompatible software versions on different stack members.

Recommended Action Ensure that all stack members are running compatible software images. 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/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

Error Message %PLATFORM-3-PW_REC_HRPC_NOT_ON_MASTER: Set-password-recovery HRPC msg
from box [dec] received on master.

Explanation The active stack has received a set-password-recovery HRPC message. These types of messages should only be received on standby systems.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %PLATFORM-3-PW_REC_HRPC_ONLY_ON_MASTER: Get-password-recovery HRPC msg from box [dec] received on slave.

Explanation A standby switch has received a get-password-recovery HRPC message. These types of messages should only be received by the active stack.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %PLATFORM-3-UNAVAILABLE: Get-password-recovery HRPC msg from box %d received on slave.

Explanation A slave switch has received a get-password-recovery HRPC message. These messages should only be received by the stack master.

Error Message %PLATFORM-3-UNAVAILABLE: Not enough hardware resources. Shutting down %s

Explanation Too many vlans and routed ports

Recommended Action Reduce the total number of vlans and routed ports to be less than 1023. If this configuration and connectivity needs to be maintained acrossreboots, save the configuration to nvram

Error Message %PLATFORM-3-UNAVAILABLE: Received incompatible length (=%d) in set-password-recovery HRPC message from box %d.

Explanation The system has received an incompatible length parameter in the set-password-recovery HRPC message. This could be caused by a stack operating with incompatible software versions on different stack members.

Recommended Action Make sure that all stack members are running compatible software images. If the problem persists, copy the error message exactly as it appears on the console or in the system log, call your Cisco technical support representative and provide the representative with the gathered information.

 $\textbf{Error Message} \ \text{\$PLATFORM-3-UNAVAILABLE:} \ \text{Set-password-recovery HRPC msg from box \$d received on master.}$

Explanation The stack master has received a set-password-recovery HRPC message. These messages should only be received on slave boxes.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PLATFORM-3-UNAVAILABLE: Slot %d %s update from version %02d.%02d to version %02d.%02d failed. System may not function properly.

Explanation FPGA update 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/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 %PLATFORM-3-UNAVAILABLE: Slot %d linecard activation failed after FPGA
update, error code = %d

Explanation Cannot activate linecard after FPGA update.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PLATFORM-3-UNAVAILABLE: Slot %d linecard deactivation failed after
FPGA update, error code = %d

Explanation Cannot deactivate linecard after FPGA update.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PLATFORM-3-UNAVAILABLE: Slot %d linecard reset failed after FPGA
update

Explanation Cannot reset linecard after FPGA update.

Error Message %PLATFORM-3-UNAVAILABLE: System FPGA update skipped for slot %d and up due to no user response.

Explanation System FPGA update skipped due to no user response

Recommended Action Please use 'upgrade fpga all' command under EXEC mode to manually start the whole-system FPGA version check and update process to ensure all the FPGAs in system are compatible.

Error Message %PLATFORM-3-UNAVAILABLE: System in minimal boot mode.

Explanation System comes up in minimal boot mode. This may due to incompatible FPGA or hardware version or the FPGA may not be properly loaded.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PLATFORM-3-UNAVAILABLE: The FPGA controller has received a fatal
interrupt, reg=%#x, mask=%#x, config=%#x - %s

Explanation The FPGA controller has received a fatal interrupt. This may be a hardware or 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/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.

PLATFORM-4

Error Message %PLATFORM-4-FPGA_MISMATCH: FPGA image in slot [dec] (name = [chars], hardware version = [dec].[dec], current fpga version = [chars]) does not match the FPGA image in Cisco IOS software (version [dec].[dec]). Approximate time to update the FPGA image is [dec] minutes.

Explanation The version of the FPGA image on the specified card differs from the Cisco IOS software bundled FPGA image version.

Recommended Action Update the FPGA image by entering the **upgrade fpga all** command.

Error Message %PLATFORM-4-FPGAUPD_RELOAD_SKIP: After the FPGA update, the card in slot [dec] was not reloaded. The card should be reloaded for the new FPGA image to take effect.

Explanation The FPGA image on the specified card is updated. The new FPGA image will not be operational until the card is reloaded. The FPGA image upgrade will take effect after the next reload of the card. The card was not reloaded due to negative user response to the reload prompt.

Recommended Action Reload the card in the specified slot. If the card is a processor, reload the router.

Error Message %PLATFORM-4-FPGA_VER_INVALID: FPGA version information for the hardware in slot [dec] (fpga [dec]) has not been cached.

Explanation An attempt to read the current FPGA version from the cache was unsuccessful. Normally, the FPGA version on the RP and line cards is read from the flash memory device and is cached during the initialization of the card. However, the FPGA image version information for the card in the specified slot has not been cached. This problem is caused by a 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 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 %PLATFORM-4-UNAVAILABLE: I/O memory size mismatch. Configured size is
%d, allocated size is %d

Explanation The allocated I/O memory size does not agree with the configured size

Recommended Action Reboot router to reallocate I/O memory

Error Message %PLATFORM-4-UNAVAILABLE: 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 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 %PLATFORM-4-UNAVAILABLE: Old version NPE-175/225 with Rev = 0x%02x system controller. Contact upgrades-info@cisco.com for replacement

Explanation NPE board has been recalled due to an errata in the system controller chip.

Recommended Action Replace NPE-175/225 Board.

Error Message %PLATFORM-4-UNAVAILABLE: Potential loss of external error interrupt,
intreg = 0x%x: %s

Explanation Cinnamon initialization masked external error interrupts.

Recommended Action Verify OIR still functions.

Error Message %PLATFORM-4-UNAVAILABLE: System cannot retrieve a compatible bundled FPGA image for slot %d %s (hardware version %d.%d), FPGA version check and update skipped

Explanation IOS does not have a compatible FPGA image bundled.

Recommended Action Please check the field alerts and other related documents to make sure this particular lineacard or NSE is supported. Upgrade the hardware or IOS if needed.

PLATFORM-6

Error Message %PLATFORM-6-UNAVAILABLE: Slot %d %s successfully updated from version %02d.%02d to %02d.%02d.

Explanation FPGA update successfully performed.

Recommended Action LOG_STD_NO_ACTION

Error Message %PLATFORM-6-UNAVAILABLE: Slot %d %s update skipped.

Explanation FPGA update skipped even though the current FPGA version is potentially incompatible.

Recommended Action Please check the field alerts and other related documents and update the FPGA if needed.

PLATFORM_CAPABILITY-4

Error Message %PLATFORM_CAPABILITY-4-UNAVAILABLE: Fatal Initialization 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 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 %PLATFORM_CAPABILITY-4-UNAVAILABLE: Fatal Initialization 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 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.

PLATFORM CAT2950-3

Error Message %PLATFORM_CAT2950-3-UNAVAILABLE: Asic driver initialization has failed

Explanation One of the ASIC initialization steps has failed. This could be a failure in the PCI configuration setup, I2C initialization, Build-in self test on the internal chip memories, or other miscellaneous initialization steps, due to a hardware defect.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PLATFORM_CAT2950-3-UNAVAILABLE: C2950 BIST failed for memory %s count
%d

Explanation During the Power-On Self Test, the Built-In memory test on the internal chip memories has failed. This could be due to an ASIC defect.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PLATFORM_CAT2950-3-UNAVAILABLE: GBP currently FULL or UNAVAILABLE.

Explanation During the switch driver initialization, an error has been detected in the external packet memory. This could be a defect in the ASIC or in the external SDRAM.

Error Message %PLATFORM_CAT2950-3-UNAVAILABLE: Invalid copy %d for table %s

Explanation This message means that there was an attempt to read or write an invalid copy of the switch internal memory. This is a recoverable error but should not happen.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %PLATFORM_CAT2950-3-UNAVAILABLE: Invalid index %d for table %s

Explanation This message means that there was an attempt to access an invalid index of the switch internal memory. This is a recoverable error but should not happen.

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 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 %PLATFORM_CAT2950-3-UNAVAILABLE: PCI address space test failed,Wrote
0x%x, read 0x%x, re-read 0x%x

Explanation During the Power-On Self Test, it is found that the PCI address space for the ASIC has not been mapped correctly. This could be a system PCI-bus-related issue.

Error Message %PLATFORM_CAT2950-3-UNAVAILABLE: Read memory failed for memory %s at
index %d

Explanation An attempt to read a valid location in the internal chip memory was failed. This could be due to a hardware defect.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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.

Explanation An attempt to read a valid location in the internal chip register failed. This could be due to a hardware defect.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %PLATFORM_CAT2950-3-UNAVAILABLE: Register write failed for register %s
in %s

Explanation An attempt to write to a location in the internal chip register failed. This might be cause by writing to a invalid register location, or a defect in the hardware.

Error Message %PLATFORM_CAT2950-3-UNAVAILABLE: S-channel operation read register
failure at addr %x

Explanation This message means that there was a failure to read a ASIC register, which might be caused by an invalid register address or an internal bus 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 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 %PLATFORM_CAT2950-3-UNAVAILABLE: S-channel operation timeout for opcode %s

Explanation This message means that there was a failure to read or write to an ASIC register or a memory location because of an ASIC internal bus 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 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 %PLATFORM_CAT2950-3-UNAVAILABLE: The PCI address space initialization failed

Explanation During the switch driver initialization, the PCI address space for the ASIC could not be initialized. This could be a system PCI-bus-related issue.

Error Message %PLATFORM_CAT2950-3-UNAVAILABLE: The board information could not be read correctly, initialization failed

Explanation During switch driver initialization, there was a failure to read the system board information. This could be a hardware 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/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.

Explanation During the switch driver initialization, incorrect number of ASICs were found on the PCI bus or no ASICs with a correct PCI value was found. This could be caused by a system PCI bus defect, or incompatible software version running on the switch.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PLATFORM_CAT2950-3-UNAVAILABLE: The switch memory resources could not be allocated for %s, initialization failed

Explanation During the switch driver initialization, driver-related memory resources could not be allocated. This could be a hardware defect.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PLATFORM_CAT2950-3-UNAVAILABLE: Unable to initialize the external packet memory

Explanation During the switch driver initialization, there was an error in the external packet memory initialization. This could be a defect in the ASIC or in the external SDRAM.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 $PLATFORM_CAT2950-3-UNAVAILABLE$: Unable to read PHY register at addr x for phy id x

Explanation This message means that there was a failure to read from or write to a PHY register on the switch. This could be caused by a defect in the MII/GMII interface of the switch.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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.

Explanation An attempt to write to a location in the internal chip memory was failed. This might be cause by writing to a invalid memory location, or a defect in the hardware.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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.

PLATFORM CAT3550-1

Error Message %PLATFORM_CAT3550-1-UNAVAILABLE: %s

Explanation The system is attempting to display the crash message from the previous crash.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PLATFORM_CATALYST2950-1-UNAVAILABLE: %s

Explanation The system is attempting to display the crash message from the previous crash.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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.

PLATFORM_FBM-4

Error Message %PLATFORM_FBM-4-UNAVAILABLE: Fallback bridging on bridge-group %d is experiencing a resource crunch. One or more bridge-groups may not be functional. It will recover automatically when system recovers from resource crunch. Delete the bridge-group to immediately recover.

Explanation Fallback bridging could not be configured properly. Most likely cause is TCAM full condition on atleast one stack member

Recommended Action Stop all traffic, issue clear mac-address-table dynamic command and restore switch's normal operation

Error Message %PLATFORM_FBM-4-UNAVAILABLE: Fallback bridging recovered from resource crunch.

Explanation Fallback bridging has recovered from earlier resource crunch

Recommended Action Nothing needs to be done.

PLATFORM_IPC-3

Error Message %PLATFORM_IPC-3-UNAVAILABLE: %s

Explanation A failure on the master

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PLATFORM_IPC-3-UNAVAILABLE: %s

Explanation A failure on the slave

Error Message %PLATFORM_IPC-3-UNAVAILABLE: %s

Explanation IPC 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 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.

PLATFORM_PBR-2

Error Message %PLATFORM_PBR-2-UNAVAILABLE: Cannot create PBR data structures for route-map %s

Explanation The PBR manager could not allocate the data structures needed to describe a route-map being used for policy routing. Probably caused by lack of available memory.

Recommended Action Use a less complicated configuration that requires less memory.

PLATFORM_PBR_3

Error Message %PLATFORM_PBR-3-UNAVAILABLE: %s ACL merge error %d on route-map %s

Explanation The PBR manager could not complete the merge of the configured route-map into a form suitable for loading into the hardware. The most likely cause is specifying an ACL that is too large or too complex for the system to handle.

Recommended Action Try specifying a smaller and less complicated configuration.

Error Message %PLATFORM_PBR-3-UNAVAILABLE: Cannot allocate label for route-map %s

Explanation The PBR manager could not allocate a label for this route-map. This means that the hardware cannot be programmed to implement policy routing. There is a limit of 247 labels for policy routing

Recommended Action Use a less complicated configuration that allows label sharing. Use the same route-maps on multiple interfaces, if possible

Error Message %PLATFORM_PBR-3-UNAVAILABLE: Policy route-map %s not installed in hardware

Explanation The PBR manager was unable to install the complete route-map in the hardware, so this will have to be applied in software. This requires the packets to be forwarded by the CPU.

Recommended Action Reconfigure the route-map to use a simpler configuration. Use the same route-map on multiple interfaces, if possible

Error Message %PLATFORM_PBR-3-UNAVAILABLE: Route-map %s not supported for Policy-Based Routing

Explanation The route-map attached to an interface for policy routing contains an action that is not supported on this platform. This is a hardware limitation.

Recommended Action Reconfigure the route-map. Use only 'permit' entries and 'set ip next-hop' action in the route-map.

PLATFORM_PBR-4

Error Message %PLATFORM_PBR-4-UNAVAILABLE: %s requires sdm template routing

Explanation In order to support this feature, sdm template routing needs to enabled.

Recommended Action Modify the Switch Database Management (SDM) template to enable the switch to support the routing template. Use the sdm prefer routing configuration command, and then reload the switch by using the reload privileged EXEC command.

Error Message %PLATFORM_PBR-4-UNAVAILABLE: Route-map %s installed in hardware upon retry

Explanation The PBR manager was able to fit the complete configuration into the hardware. One or more route-maps had previously not been loaded because of lack of space.

Recommended Action LOG_STD_NO_ACTION

 $\label{lem:condition} \textbf{Error Message} \ \text{\$PLATFORM_PBR-4-UNAVAILABLE:} \ \text{Set action in sequence \$d of route-map \$s supported by forwarding to CPU}$

Explanation The route-map attached to an interface for policy routing contains an action that is not supported in hardware since it contains a 'set interface', 'set ip default next-hop', 'set default interface' or or 'set ip df' actions. This requires the packets to be forwarded by the CPU.

Recommended Action Reconfigure the route-map. Use only 'set ip next-hop' in the route-map, if possible.

PLATFORM PM-3

Error Message %PLATFORM_PM-3-UNAVAILABLE: Unit number %d of interface %s is more than max allowed value of %d

Explanation System supports limited number of interfaces for each interface type. User created more than supported interfaces

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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.

Explanation internal vlan_data is not active for the given vlan-id

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PLATFORM_PM-3-UNAVAILABLE: internal vlan-id %d allocated for interface %s is still in use

Explanation internal vlan-id allocated for an interface is still in use

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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.

PLATFORM RPC-0

Error Message %PLATFORM_RPC-0-UNAVAILABLE: %s

Explanation System is unable to alloc memory for RPC

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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.

PLATFORM_RPC-3

Error Message %PLATFORM_RPC-3-UNAVAILABLE: Bad Class in RPC message: %u

Explanation class table missing entry for message 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/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 %PLATFORM_RPC-3-UNAVAILABLE: Failed to send RPC message in class %d,
req %d, %s

Explanation Local resource error or too many outgoing messages queued up for msg class

Error Message %PLATFORM_RPC-3-UNAVAILABLE: RPC Msg Dropped by throttle mechanism: type %u, class %u, max_msg %u, total throttled %u

Explanation too many outgoing messages queued up for msg 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/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 %PLATFORM_RPC-3-UNAVAILABLE: System is consistently unable to send RPC message: %s, paks_outstanding: %u

Explanation Persistent Low-level transport failure in sending RPC 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 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 %PLATFORM_RPC-3-UNAVAILABLE: System is unable to send RPC message: %s, paks_outstanding: %u

Explanation Low-level transport failure in sending RPC message

Error Message %PLATFORM_RPC-3-UNAVAILABLE: Unexpected response or failure, class %d,
req %d, switch %d, error %d, %s

Explanation Received a response 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/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.

PLATFORM_SPAN-3

Error Message %PLATFORM_SPAN-3-UNAVAILABLE: Decreased egress SPAN rate.

Explanation When SPAN is enabled with multicast routing orbridge groups, egress span rates will fall down.Not all packets going out may be monitored

Recommended Action Contact Cisco TAC.

PLATFORM_UCAST-3

Error Message %PLATFORM_UCAST-3-UNAVAILABLE: %s

Explanation An internal platform unicast routing error 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 %PLATFORM_UCAST-3-UNAVAILABLE: %s

Explanation Platform unicast routing adjacency module encountered an 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/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 %PLATFORM_UCAST-3-UNAVAILABLE: %s

Explanation Platform unicast routing arp module encountered an 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 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 %PLATFORM_UCAST-3-UNAVAILABLE: %s

Explanation Platform unicast routing backwalk loadbalance module encountered an 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 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 %PLATFORM_UCAST-3-UNAVAILABLE: %s

Explanation Platform unicast routing cef module encountered an 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 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 %PLATFORM_UCAST-3-UNAVAILABLE: %s

Explanation Platform unicast routing hsrp module encountered an 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 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 %PLATFORM_UCAST-3-UNAVAILABLE: %s

Explanation Platform unicast routing interface related error 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 %PLATFORM_UCAST-3-UNAVAILABLE: %s

Explanation Platform unicast routing loadbalance module encountered an error

Error Message %PLATFORM_UCAST-3-UNAVAILABLE: %s

Explanation Platform unicast routing module received a NULL software object handle

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PLATFORM_UCAST-3-UNAVAILABLE: %s

Explanation Platform unicast routing rpc module encountered an 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 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 %PLATFORM_UCAST-3-UNAVAILABLE: %s

Explanation Platform's dynamic address tracking mechanism encountered an error.

PLATFORM VLAN-3

Error Message %PLATFORM_VLAN-3-UNAVAILABLE: Failed to lock vlan-id %d, associated mapped vlan id value %d

Explanation VLAN lock operation failed. Most likely cause might be either the vlan already active in the system or the vlan-id is not 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/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 %PLATFORM_VLAN-3-UNAVAILABLE: Failed to unlock vlan-id %d, associated mapped vlan id value %d

Explanation failed to unlock vlan-id. Most likely cause is the vlan is already freed

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PLATFORM_VLAN-3-UNAVAILABLE: Mapped Vlan ID value %d associated with
vlan-id %d is invalid

Explanation Each active vlan in the system is associated with a mapped-vlan-id and the mvid is not correct/valid

PM Messages

This section contains port manager (PM) messages.

PM-1

Error Message %PM-1-INCONSISTENT_PORT_STATE: Inconsistent HW/SW port state for
[chars]. Please shut/no shut the interface

Explanation The hardware and software port state has become inconsistent. [chars] is the interface.

Recommended Action No action is necessary. This message is informational only.

PM-2

Error Message %PM-2-UNAVAILABLE: Failed to add VLAN %d - %s.

Explanation Failed in adding VLAN to VTP. The reason is stated in the string.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PM-2-UNAVAILABLE: Not enough memory available for %s

Explanation The Port Manager subsystem could not obtain the memory it needed.

Error Message %PM-2-UNAVAILABLE: Switch process available memory is less than %d bytes

Explanation Switch Processor available memory dropped to a low level. Possibly too many Layer 2 VLANs are configured in the system.

Recommended Action Removed features from the system to reduce memory usage.

PM-3

Error Message %PM-3-ERR_INCOMP_PORT: <mod/port> is set to inactive because
<mod/port> is a trunk port

Explanation An isolated or community VLAN port or private host port cannot be configured on the same COIL application-specific integrated circuit (ASIC) when another port is either a trunk, a SPAN destination, or a promiscuous PVLAN port, or if a port is configured as dynamic desirable mode (the default mode on some switches).

Recommended Action To reactivate the ports, remove the isolated or community VLAN port configuration and enter the **shutdown** command followed by the **no shutdown** command. Configure the incompatible port on a different ASIC on the module or on a different module. Refer to the module documentation to determine which ports share an ASIC. If ports are configured (manually or by default) as dynamic desirable mode, configure the ports as access mode using the **switchport mode access** command.

PM-4

Explanation This is a defensive measure that will put the interface in err-disable state when it detects a mis-configuration or mis-behavior. A recovery will be attempted after the configured retry time (default 5 minutes).

Error Message %PM-4-UNAVAILABLE: %s failed to come up. No internal VLAN available

Explanation Port Manager failed to allocate internal VLAN and thus the interface cannot come up.

Recommended Action Remove extended range VLAN to free up resouces.

Error Message %PM-4-UNAVAILABLE: %s was detected

Explanation An invalid request was detected by the Port Manager.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PM-4-UNAVAILABLE: Attempting to recover from %s err-disable state on %s

Explanation This is an attempt to bring the interface back after taking it down to err-disable 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 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 %PM-4-UNAVAILABLE: Dynamic access VLAN %d same as voice vlan on %s.

Explanation Access VLAN on VMPS server is set to same VLAN as voice VLAN on the port.

Recommended Action Access VLAN assignment on VMPS server should be different from voice VLAN.

Error Message %PM-4-UNAVAILABLE: Failed to allocate internal VLAN in Port Manager

Explanation Port Manager failed to find any available internal VLAN

Recommended Action Delete some extened range VLANs created by users or remove some features that require internal VLAN allocation, e.g. routed port

Error Message %PM-4-UNAVAILABLE: Failed to set VLAN %d to a %s VLAN

Explanation Platform failed to set private vlan type.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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.

Explanation Internal VLAN allocation for the tunnel interface has failed

Recommended Action Delete some extended range VLANs created by users or remove some features that require internal VLAN allocation, e.g. routed port

Error Message %PM-4-UNAVAILABLE: Invalid Host access entry event (%d) is received

Explanation Host access table is entry event is not any of add/delete/update 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 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 %PM-4-UNAVAILABLE: Invalid Host access entry type (%d) is received

Explanation Host access entry should be one of configured/dynamic type

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PM-4-UNAVAILABLE: Invalid Host access value (%d) is received

Explanation Host access table is being accesses with an invalalid host access 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/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 %PM-4-UNAVAILABLE: MPLS MTU size %d is not supported by one or more ports in channel %s.

Explanation The MPLS MTU size configured on the ethernet channel is larger than the maximum MTU size that can be supported by one or more ports in this channel. As a result, large packets can be dropped.

Recommended Action Reduce the MPLS MTU size, or remove these ports from the channel before increasing the MPLS MTU size.

Error Message %PM-4-UNAVAILABLE: MPLS MTU size %d is not supported by port %s.

Explanation The MPLS MTU size configured on the port is larger than the maximum MTU size that can be supported by this port. As a result, large packets can be dropped.

Recommended Action Reduce the MPLS MTU size.

Error Message %PM-4-UNAVAILABLE: No PM subblock found for %s

Explanation Failed to find PM subblock for this interface.

Error Message %PM-4-UNAVAILABLE: No PM subblock found for interface %s

Explanation This syslog, along with T/B, is logged for all type of interfaces where PM subblock is absent. The interface types include WAN, loopback and tunnel, which do not have associated PM subblock as per the design. This message helps the PM group to identify the offending application. This message indicates that PM module encounters unusual conditions for diagnose purpose.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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.

 $\mbox{\it Error Message}$ %PM-4-UNAVAILABLE: Port %s was bounced by %s.

Explanation The Port Manager needed to perform a reactivation of a port in the link down state during a switchover. A port is only reactivated when the port data structures lack consistency between the active and standby supervisors. Active ports in the link down state were returned to the link up state by the reactivation event.

Recommended Action LOG_STD_NO_ACTION

 ${\bf Error\; Message}\;$ %PM-4-UNAVAILABLE: The number of vlan-port instances on %s exceeded the recommended limit of %d

Explanation The total number of individual VLAN ports, counted over the module or switch specified in the error message, has exceeded the module or switch limit specified in the error message. VLANs can be counted more than once; if VLAN 1 is carried on 10 interfaces, it will count as 10 VLAN ports. For some platforms, e.g. Catalyst 6000, bundling is also ignored for purposes of this count; if 8 interfaces on the same module are in one bundle, and the port channel is carrying VLAN 1, it will count as 8 VLAN ports.

Recommended Action Reduce the number of trunks and VLANs configured in the module or switch specified in the error message. Keep the virtual port, VLAN port, count below the recommended limit specified in the configuration documentation. Enter the **show interface trunk** command to see the total number of trunks and VLANs.

Error Message %PM-4-UNAVAILABLE: VLAN %d currently in use by %s

Explanation Port Manager failed to allocate the VLAN for external use as the VLAN is currently occupied by another feature

Recommended Action Reconfigure the feature, e.g. routed port, to use another interal VLAN; Or request another available VLANs.

Error Message %PM-4-UNAVAILABLE: VLAN %d not available in Port Manager

Explanation Port Manager failed to allocate the requested VLAN. The VLAN is mostly likely used as internal VLAN by other features

Recommended Action Try a different VLAN on the device.

Error Message PM-4-UNAVAILABLE: Vlan %d must be added to L2 database in order to be used, do from config mode.

Explanation When an SVI is created, corresponding L2 VLAN is not automatically created in the L2 database. Hence give an error message if the vlan is not in the L2 database.

Recommended Action Create an L2 VLAN before SVI is created.

Explanation An invalid request was detected by the Port Manager.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PM-4-UNAVAILABLE: an invalid application id (%d) was detected

Explanation An invalid request was detected by the Port Manager.

Error Message %PM-4-UNAVAILABLE: an invalid card cookie was detected

Explanation An invalid request was detected by the Port Manager.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PM-4-UNAVAILABLE: an invalid card slot (%d) was detected

Explanation An invalid request was detected by the Port Manager.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PM-4-UNAVAILABLE: an invalid port cookie was detected

Explanation An invalid request was detected by the Port Manager.

Error Message %PM-4-UNAVAILABLE: an invalid port number (%d) was detected

Explanation An invalid request was detected by the Port Manager.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PM-4-UNAVAILABLE: an invalid vlan cookie was detected

Explanation An invalid request was detected by the Port Manager.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PM-4-UNAVAILABLE: an invalid vlan id (%d) was detected

Explanation An invalid request was detected by the Port Manager.

Error Message %PM-4-UNAVAILABLE: application '%s' exceeded registration limit

Explanation An invalid request was detected by the Port Manager.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PM-4-UNAVAILABLE: putting %s in inactive state because %s

Explanation The Port Manager has been blocked from creating a virtual port for the switch port and VLAN, causing the port to be in an inactive state. The reason for this condition is specified in the error 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. 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.

PM-6

Error Message %PM-6-ACTIVE: Interface [chars] is now active because [chars]

Explanation The port manager has detected an interface that was down as up for the VLAN, causing the port to be in the active state.

Recommended Action No action is required.

PMOD-3

Error Message %PMOD-3-UNAVAILABLE: %s

Explanation Error Messages

Recommended Action try debug command

PMOD-6

Error Message

Error Message %PMOD-6-UNAVAILABLE: %s

Explanation Program information

PMOD-7

Recommended Action

Error Message %PMOD-7-UNAVAILABLE: %s

Explanation Debug Messages

PMB Messages

This section contains power management bus (PMB) messages.

PMB-4

Error Message %PMB-4-CANTPWROFF: Attempts to power down slot [dec] failed, card will be disabled.

Explanation The system could not power down the module in slot [dec], possibly due to a hardware failure.

PM_ISSU Messages

This section contains port manager (PM) in-service software upgrade (ISSU) messages.

PM_ISSU-3

Error Message %PM_ISSU-3-BUFFER: Port Manager ISSU client failed to get buffer for
message, error %d

Explanation The port manager ISSU client was unable to get buffer space for building a negotiation message. As a result, the client cannot send the negotiation message to the standby unit and the standby unit cannot be brought 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/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 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, show logging, and show checkpoint client commands and your pertinent troubleshooting logs.

Error Message %PM_ISSU-3-CAPABILITY: Port Manager ISSU client %s

Explanation The port manager ISSU client detected an error during capability negotiation. As a result, there is a mismatch in the client capability between the active and standby unit.

Explanation The port manager ISSU client could not be initialized. This condition will cause a catastrophic failure when an ISSU upgrade or downgrade is performed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %PM_ISSU-3-MSG_NOT_OK: Port Manager ISSU client message %d is not compatible

Explanation The port manager ISSU client received an incompatible message from the peer unit. The message cannot be processed by this unit.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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, show logging, show issu message group, show issu session, and show issu negotiated version commands and your pertinent troubleshooting logs.

Error Message %PM_ISSU-3-MSG_SIZE: Port Manager ISSU client failed to get the message size for message %d

Explanation The port manager ISSU client was unable to calculate the message size for the message specified. The PM ISSU client will be unable to send the message to the standby unit.

Error Message %PM_ISSU-3-POLICY: Port Manager ISSU client message type %d is %s

Explanation The port manager ISSU client received a message type that it does not support. A policy is applied to make the session compatible.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 issu session commands and your pertinent troubleshooting logs.

Error Message %PM_ISSU-3-SEND_FAILED: Port Manager ISSU client failed to send a negotiation message, error %d

Explanation The port manager ISSU client could not send a session negotiation message to the peer. As a result, the standby unit cannot be brought 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/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 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, show logging, and show checkpoint client commands and your pertinent troubleshooting logs.

Error Message %PM_ISSU-3-SESSION: Port Manager ISSU client %s

Explanation The port manager ISSU client detected an error during a session negotiation with the peer unit. As a result, the standby unit cannot be brought up.

Error Message %PM_ISSU-3-SESSION_UNREGISTRY: Port Manager ISSU client failed to unregister session information. Error: %d (%s)

Explanation The port manager ISSU client was unable to unregister session information.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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, show logging, show issu session, and show issu negotiated capability commands and your pertinent troubleshooting logs.

Error Message %PM_ISSU-3-TRANSFORM: Port Manager ISSU client %s transform failed,
error %s

Explanation The port manager ISSU client could not transform the message. If the transmit transformation failed, the checkpoint message cannot be sent to the standby unit. If the receive transformation failed, the checkpoint message cannot be applied on the standby unit. In either case, the port manager state will not be identical with the active unit.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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, show logging, show issu session, and show issu negotiated version commands and your pertinent troubleshooting logs.

PM MODEM HIST-7

```
Error Message %PM_MODEM_HIST-7-UNAVAILABLE: %s: %s %*s State: %s
```

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

 $\textbf{Recommended Action} \quad LOG_STD_DBG_ACTION$

```
Error Message %PM_MODEM_HIST-7-UNAVAILABLE: %s: %s %s
```

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

```
\textbf{Recommended Action} \quad LOG\_STD\_DBG\_ACTION
```

Error Message %PM_MODEM_HIST-7-UNAVAILABLE: %s: %s %s

Explanation This is a tracing message indicating a link rate event reported by the specified modem.

 $\textbf{Recommended Action} \quad LOG_STD_DBG_ACTION$

Error Message %PM_MODEM_HIST-7-UNAVAILABLE: %s: %s %s

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

 $\textbf{Recommended Action} \quad LOG_STD_DBG_ACTION$

PM MODEM MAINT-4

Error Message %PM MODEM MAINT-1-UNAVAILABLE: Initialization failed.

Explanation Modem maintenance facility initialization failed.

Recommended Action Disable Autotest, Poweron test and avoid manual back-2-back test. Copy the message exactly as it appears on the 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 $PM_MODEM_MAINT-1-UNAVAILABLE: Invalid modem management %s event <math>0x\%02x$ for modem(%s)

Explanation The modem management facility received an unrecognize event.

Error Message %PM_MODEM_MAINT-1-UNAVAILABLE: Modem (%s) failed %s

Explanation A software or hardware problem has been detected on a modem. The specific modem and reason are listed in 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. 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 %PM_MODEM_MAINT-4-UNAVAILABLE: 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. Copy the message exactly as it appears on the 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 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 $PM_MODEM_MAINT-4-UNAVAILABLE: Modems (%s) and (%s) failed back-to-back test: %s$

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. Copy the message exactly as it appears on the 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 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.

PM_MODEM_MAINT-5

Error Message %PM_MODEM_MAINT-5-UNAVAILABLE: Auto Back-to-Back test initiated by %s

Explanation This is a tracing message indicating an automatic back-to-back test was initiated by the specified MICA modem.

 $\textbf{Recommended Action} \quad LOG_STD_DBG_ACTION$

Error Message %PM_MODEM_MAINT-5-UNAVAILABLE: Modem (%s) passed the test

Explanation Tests on the specified modem were successful.

Recommended Action LOG_STD_NO_ACTION

Error Message %PM_MODEM_MAINT-5-UNAVAILABLE: Modems (%s) and (%s) completed
back-to-back test: success/packets = %d/%d

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

 $\textbf{Recommended Action} \quad LOG_STD_NO_ACTION$

Error Message %PM_MODEM_MAINT-5-UNAVAILABLE: Modems (%s) and (%s) connected in back-to-back test: %s

Explanation A back to back test connection has been made between the selected modems. The test is still in progress.

Recommended Action LOG_STD_NO_ACTION

PM_PVLAN_ISSU Messages

This section contains port manager (PM) private VLAN (PVLAN) in-service software upgrade (ISSU) messages.

PM PVLAN ISSU-3

Error Message %PM_PVLAN_ISSU-3-BUFFER: Private Vlan ISSU client failed to get buffer
for message, error %d

Explanation The private VLAN ISSU client was unable to get a buffer for building a negotiation message. As a result, it cannot send the negotiation message to the standby unit and the standby unit cannot be brought 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/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 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, show logging, and show checkpoint client commands and your pertinent troubleshooting logs.

Error Message %PM_PVLAN_ISSU-3-CAPABILITY: Private Vlan ISSU client %s

Explanation The private VLAN ISSU client detected an error during capability negotiation. As a result, there is a mismatch in the client capability between the active and standby unit.

Error Message %PM_PVLAN_ISSU-3-INIT: pm_pvlan Client Name ISSU client initialization
failed at %s, error %s

Explanation The private VLAN ISSU client could not be initialized. This condition will cause a catastrophic failure when an ISSU upgrade or downgrade is performed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %PM_PVLAN_ISSU-3-MSG_NOT_OK: Private Vlan ISSU client message %d is
not compatible

Explanation The private VLAN ISSU client received an incompatible message from the peer unit. The message cannot be processed by this unit.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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, show logging, show issu message group, show issu session, and show issu negotiated version commands and your pertinent troubleshooting logs.

Error Message %PM_PVLAN_ISSU-3-MSG_SIZE: Private Vlan ISSU client failed to get the message size for message %d

Explanation The private VLAN ISSU client was unable to calculate the message size for the message specified. The client will be unable to send the message to the standby unit.

Error Message %PM_PVLAN_ISSU-3-POLICY: Private Vlan ISSU client message type %d is %s

Explanation The private VLAN ISSU client received a message type that it does not support. A policy is applied to make the session compatible.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 issu session commands and your pertinent troubleshooting logs.

Error Message %PM_PVLAN_ISSU-3-SEND_FAILED: Private Vlan ISSU client failed to send
a negotiation message, error %d

Explanation The private VLAN ISSU client could not send a session negotiation message to the peer. As a result, the standby unit cannot be brought 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/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 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, show logging, and show checkpoint client commands and your pertinent troubleshooting logs.

Error Message %PM_PVLAN_ISSU-3-SESSION: Private Vlan ISSU client %s

Explanation The private VLAN ISSU client detected an error during a session negotiation with the peer unit. As a result, the standby unit cannot be brought up.

Error Message %PM_PVLAN_ISSU-3-TRANSFORM: Private Vlan ISSU client %s transform
failed, error %s

Explanation The private VLAN ISSU client could not transform the message. If the transmit transformation failed, the checkpoint message cannot be sent to the standby unit. If the receive transformation failed, the checkpoint message cannot be applied on the standby unit. In either case, the private VLAN ISSU state will not be identical with the active unit.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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, show logging, show issu session, and show issu negotiated version commands and your pertinent troubleshooting logs.

PM_SCP Messages

This section contains port manager Switch-Module Configuration Protocol (PM_SCP) messages.

PM_SCP-1

Error Message %PM_SCP-1-LCP_FW_ERR_POWERDOWN: Module [dec] will be powered down due to firmware error: [chars]

Explanation A nonrecoverable error was detected by the switching module firmware and the switching module will be powered down to keep the system functioning. [dec] is the module number and [chars] explains that the system will be powered down.

Recommended Action No action is required.

PM SCP-2

Error Message %PM_SCP-2-LCP_FW_ERR_INFORM: Module [dec] is experiencing the following error: [chars]

Explanation The linecard is reporting an error condition, where [dec] is the module number, and [chars] is the error. This condition is usually caused by an improperly seated linecard or a hardware failure. If the error message is seen on all of the linecards, the cause is an improperly seated module.

Recommended Action Reseat and reset the linecard or the module. If the error message persists after the module is reset, copy the message exactly as it appears on the 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 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 %PM_SCP-2-SPURIOUS_INTERRUPT: Module [dec] detects [dec] spurious interrupts from asic [chars].

Explanation An error condition was detected by the active supervisor engine firmware. If **error-detection crash-action** is configured, the active supervisor engine will switch over to the standby supervisor engine in a redundant setup.

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 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 %PM_SCP-2-RESET: Module [dec] is resetting - Due to Packet Buffer
Error.

Explanation An error condition was detected by the line card firmware and the supervisor engine has initiated a reset procedure for the line card.

Error Message %PM_SCP-2-SHUTDOWN: Module [dec] is shutting down - Due to Packet Buffer Error.

Explanation An error condition was detected by the line card firmware and the supervisor engine has initiated a shutdown procedure for the line 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 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 %PM_SCP-2-STDBY_NOT_SWTCH_OVER: Standby is not ready for switchover for Packet Buffer Error. Active-Sup (Module [dec]) is going down...

Explanation An error condition was detected by the active supervisor engine firmware and the standby supervisor engine is not ready for switchover, so the active supervisor engine is going down.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PM_SCP-2-STDBY_RELOAD: Standby (Module [dec]) is reloading due to Packet Buffer Error...

Explanation An error condition was detected by the supervisor engine firmware and the standby supervisor engine is reloading now.

Error Message %PM_SCP-2-STDBY_SWTCH_OVER: Supervisor (Module [dec]) is preparing for switch-over - Due to Packet Buffer Error.

Explanation An error condition was detected by the supervisor engine firmware and has initiated the switchover action.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PM_SCP-2-TRANSCEIVER_BAD_HW: Module [dec] will be power disabled for safety reasons because a defective transceiver is inserted at [chars].

Explanation An inappropriate transceiver is inserted at the specified interface. This transceiver should not be used in this system.

Recommended Action Remove the specified transceiver and enable power to the module. If this transceiver was purchased from Cisco, contact Cisco TAC to get the transceiver replaced.

Error Message %PM_SCP-2-TRANSCEIVER_INCOMPATIBLE: Transceiver inserted in [chars]
port [dec]/[dec] is not compatible with its interface (transceiver speed is
[chars], interface speed is [chars])

Explanation An incompatible transceiver was inserted in the specified module. This transceiver should not be used with this module.

Recommended Action Replace the specified transceiver with another transceiver that is compatible with this module.

PM SCP-3

Error Message %PM_SCP-3-LCP_FW_ABLC: Late collision message from module [dec],
port:0[dec]

Explanation The line card firmware has detected abnormal collisions in port traffic.

Recommended Action This is usually a temporary condition. Check for any mismatch in the Duplex or Speed setting with the remote device. 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 %PM_SCP-3-TRANSCEIVER_BAD_EEPROM: Integrity check on transceiver in
[chars] port [dec]/[dec] failed: bad key

Explanation The transceiver has an incorrectly programmed EEPROM.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PM_SCP-3-TRANSCEIVER_DUPLICATE: Transceiver in [chars] port
[dec]/[dec] and in [chars] port [dec]/[dec] have duplicate serial numbers

Explanation The transceiver was identified as a Cisco transceiver, but its vendor ID and serial number match that of another transceiver on 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/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 %PM_SCP-2-TRANSCEIVER_INCOMPATIBLE: Transceiver inserted in [chars]
port [dec]/[dec] is not compatible with its interface (transceiver speed is
[chars], interface speed is [chars])

Explanation An incompatible transceiver is inserted in the specified module. This transceiver should not be used with this module.

Recommended Action Replace the specified transceiver with another transceiver that is compatible with this module.

PM_SCP-4

Error Message %PM_SCP-4-FPOE_INFO: An unsupported distributed fabric card has been detected

Explanation Fabric-capable modules are not supported in this 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/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 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 %PM_SCP-4-LCP_FW_ABLC: Late collision message from module [dec],
port:0[dec]

Explanation The line card firmware has detected abnormal collisions in port traffic. This message is typically an indication of a speed or duplex mismatch, possibly caused by a misconfiguration.

Recommended Action This is usually a temporary situation. Check the speed and duplex for the port and make sure that it is correct. For correct operation, both sides of a link should be auto-negotiated or both sides should be manually configured for speed and duplex. Do not configure auto-negotiation on one side and manual setting on the other, because the auto-negotiating side might lock at the wrong duplex setting.

Error Message %PM_SCP-4-TRANSCEIVER_UNSUPP_MODULE: Interface [chars] does not support receive-only transceivers

Explanation A receive-only transceiver has been inserted into a module that does not support it.

Recommended Action Use the receive-only transceiver with a supported module. Refer to the documentation for modules that support receive-only transceivers.

Error Message %PM_SCP-4-UNSUPPORTED: Interface [chars] does not support receive-only
transceivers

Explanation A receive-only transceiver has been inserted into a slot that does not support it.

Recommended Action Use the receive-only transceiver with a supported module.

PM SCP-6

Error Message %PM_SCP-6-LCP_FW_ERR_INFORM: Module [dec] is experiencing the following error: [chars]

Explanation The module is reporting an error condition, where [dec] is the module number, and [chars] is the error. This condition is usually caused by an improperly seated linecard or a hardware failure. If the error message is seen on all of the linecards, the cause is an improperly seated module.

Recommended Action Reseat and reset the linecard or the module. If the error message persists after the module is reset, copy the message exactly as it appears on the 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 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.

PNNI-2

Error Message %PNNI-2-UNAVAILABLE: %s

Error Message %PNNI-2-UNAVAILABLE: Empty Internal Number Stack: %s

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/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 %PNNI-2-UNAVAILABLE: Tent List Overflow in %s

Explanation An internal software 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.

PNNI-3

Error Message %PNNI-3-UNAVAILABLE: %s%s %x

Explanation An internal software error occurred. The message contains more information that can be used to identify 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/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 PNNI-3-UNAVAILABLE: Bad address of %s x, please collect show atm pnni trace error

Explanation An internal software error occurred.

PNNI-4

Error Message %PNNI-4-UNAVAILABLE: %s %s for node %d %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 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 %PNNI-4-UNAVAILABLE: Address derived from the switch's prefix by soft PVC manager %s clashes with existing address in prefix table

Explanation An PVC port address assignment has collided with an existing address. An address that would have been assigned by this switch has already been assigned by another.

Recommended Action If possible, assign a new MAC address to the peer system that caused the assignment collision.

Error Message %PNNI-4-UNAVAILABLE: Bad Request from Signaling %x

Explanation A source routing request by another network host was corrupted.

Recommended Action Check the originating system for a cause of the problem.

Error Message %PNNI-4-UNAVAILABLE: Configuration Error: %s

Explanation This message indicates a configuration error in the PNNI subsystem. The message will display more specific information about the cause of problem.

Recommended Action Change the configuration to correct the error.

Error Message %PNNI-4-UNAVAILABLE: Error: %s

Explanation An internal software 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 %PNNI-4-UNAVAILABLE: Invalid %s pkt: %s %d %d

Explanation An invalid packet was received from a network peer.

Recommended Action Check the originating device for a cause of the corrupted packets.

PNNI-6

Error Message %PNNI-6-UNAVAILABLE: %s

Explanation This is an informational message only.

Recommended Action Informational messages can be disabled by changing logging level.

PNNI-7

Error Message %PNNI-7-UNAVAILABLE: %s

Explanation This is an informational message only. It is used by Cisco for testing.

Recommended Action Informational messages can be disabled by changing logging level.

POLARIS Messages

This section contains Layer 3 CEF engine (POLARIS) messages.

POLARIS-4

Error Message %POLARIS-4-ERR_INTRPT: Interrupt [chars] occurring in Polaris Layer 3
ASIC

Explanation An error occurred in the Layer 3 forwarding ASIC. The error description is shown by [chars].

Recommended Action These errors are transient conditions caused by traffic passing through the ASIC, and may appear occasionally under normal conditions. If this message recurs, enter the **show earl status** command on the consoles of the switch supervisor engine and any DFC-enabled modules. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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.

POLICY_API Messages

This section contains policy API messages.

POLICY API-4

Error Message %POLICY_API-4-POLICYDYNCLR: Dynamic policy on intf:[chars] cleared. Static policy in use.

Explanation A dynamic policy was attempting to override the static policy. The dynamic policy has been cleared, the static policy is now in effect.

Recommended Action No action is required.

Error Message %POLICY_API-4-POLICYOVERIDE: Dynamic policy overriding static on intf:[chars]

Explanation Both a static policy and a dynamic policy are configured on the interface. The dynamic policy will override the static policy.

Recommended Action If preferred, remove the static policy configuration.

Error Message %POLICY_API-4-POLICYSTATICCLR: Static policy on intf:[chars] cleared.
Dynamic policy in use.

Explanation A dynamic policy has overridden the static policy. The static policy has been cleared.

Recommended Action No action is required.

POLICY_MANAGER Messages

This section contains Policy Manager messages.

POLICY MANAGER-2

Error Message %POLICY_MANAGER-2-INIT_FAILURE: Init failure: [chars]

Explanation A problem occurred during the initialization of the policy manager during system 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 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 %POLICY_MANAGER-2-NO_FREE_EVENT_BUFFERS: Event pool depleted: [chars]

Explanation The event pool has been depleted. There are no free buffers to process the 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 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.

POLICY_MANAGER-3

Error Message %POLICY_MANAGER-3-INVALID_ACTION: Invalid action

Explanation An invalid action was performed by the policy manager.

Error Message %POLICY_MANAGER-3-INVALID_PARAMETERS: A call to Policy Manager is made with invalid parameters

Explanation A call to the policy manager was made with one or more invalid parameters.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %POLICY_MANAGER-3-INVALID_SEVERITY: Invalid event severity [hex]

Explanation The event that was received by the policy manager contained an invalid severity and was not processed.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %POLICY MANAGER-3-NO FREE POLICY IDS: No more Policy IDs available

Explanation There are no more policy IDs that can be allocated. Policy manager policies can no longer be created.

Error Message %POLICY_MANAGER-3-NULL_ACTION_ROUTINE: NULL action routine invoked

Explanation The policy manager attempted to invoke an action that was of a null 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/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 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 %POLICY_MANAGER-3-PRE_INIT_CALL: Policy Manager routine called prior to initialization

Explanation The policy manager component was called prior to its initialization. This action could result in vital information being 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 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.

PORT_SECURITY Messages

This section contains port security messages.

PORT_SECURITY-2

Error Message %PORT_SECURITY-2-INELIGIBLE: Port security configuration on [chars] is being made inactive since the port is now not eligible for port security as [chars].

Explanation A port had port security configuration on it, but the port now has a configuration not supported with port security. Because the port is now not eligible for port security, the port security configuration on it is being made inactive.

Recommended Action Check the port's configuration and remove the offending configuration that is not compatible with port security.

Error Message %PORT_SECURITY-2-PSECURE_VIOLATION: Security violation occurred, caused by MAC address [enet] on port [chars].

Explanation An unauthorized device attempted to connect on a secure port. The MAC address of the unauthorized device and the secure port are specified in the message.

Recommended Action Determine the device that attempted to connect on the secure port. Notify your network system administrator of this condition.

PORT SECURITY-6

Error Message %PORT_SECURITY-6-ADDR_EXCEEDS_LIMIT: Address <[int]:[enet]> can not be
allowed on port [chars] because of max address limits. It has been removed

Explanation A routed port has changed to a switched port. The addresses stored in the previous switched-port configuration are now causing the total secure address count to exceed the allowed limit and they have been deleted

Recommended Action This is an informational message only. No action is required.

Error Message %PORT_SECURITY-6-ADDR_REMOVED: Address <[int]:[enet]> exists on port
[chars]. It has been removed from port [chars].

Explanation A routed port has changed to a switched port. An address stored in the previous switched-port configuration is now in conflict and has been deleted.

Recommended Action This is an informational message only. No action is required.

Error Message %PORT_SECURITY-6-INVALID_SESSION: Invalid Port-Security ISSU Session
ID

Explanation The ISSU session ID is not valid because it has not been negotiated.

Recommended Action No action is required.

Error Message %PORT_SECURITY-6-VLAN_REMOVED: VLAN(S) [chars] is/are no longer allowed on port [chars]. Their port security configuration has been removed.

Explanation A configured VLAN has been excluded on a trunk port and so is being removed from the configuration.

Recommended Action This is an informational message only. No action is required.

POS-1

Error Message %POS-1-UNAVAILABLE: %s initialization failed

Explanation The POS line card failed to complete hardware initialization.

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

Error Message %POS-1-UNAVAILABLE: %s(%d) Hardware failure. %s

Explanation The POS line card encountered a hardware failure. The line card will be deactivated.

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

Error Message ~ %POS-1-UNAVAILABLE: \$s(\$d) ~ Only found \$d interfaces, deactivating line card

Explanation The POS hardware failed. Incorrect number of interfaces discovered.

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

Error Message %POS-1-UNAVAILABLE: %s(%d/%d) Failed to obtain PXF resources, error=%d, shutting down interface

Explanation The POS line card failed to get the PXF resources. The interface will be shutdown if already up or deactivated if this card was OIRed.

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

POS-3

Error Message %POS-3-UNAVAILABLE: %s(%d) %s

Explanation The POS hardware is not supported on this platform.

Recommended Action Upgrade your system.

POSDW-1

Error Message %POSDW-1-UNAVAILABLE: %s init timed out

Explanation The PA-POS-OC3 port adaptor driver failed to complete hardware initialization.

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

Error Message %POSDW-1-UNAVAILABLE: Only found %d interfaces on bay %d, shutting down bay

Explanation The PA-POS-OC3 port adaptor hardware initialization failed. Incorrect number of interfaces discovered.

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

POSDW-3

Error Message %POSDW-3-UNAVAILABLE: %s

Explanation The PA-POS-OC3 port adaptor is not supported on this platform. The system log specifies the part of the system that requires an upgrade.

Recommended Action Upgrade your system to a platform that supports the PA-POS-OC3 port adapter. Refer to the system log to determine what part of your system requires an upgrade.

Error Message %POSDW-3-UNAVAILABLE: %s packet buffer, pak=0x%x

Explanation A software or hardware error occurred. The PA-POS-OC3 port adaptor driver detected that the transmit ring is in an inconsistent and unrecoverable state.

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

Error Message %POSDW-3-UNAVAILABLE: Device reported %#x

Explanation The PA-POS-OC3 port adaptor hardware initialization failed. Found incorrect device identifier.

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

POSLC Messages

This section contains Packet over SONET line card (POSLC) messages.

POLSLC-1

Error Message %POSLC-1-UNAVAILABLE: POSLC(%d/%d), initialization timeout failure

Explanation LC POS ASIC and framer initialization failed

Recommended Action Copy the error message exactly as it appears on the console or in the system log. If you cannot determine the nature of the error from the error message text, call your Cisco technical support representative and provide the representative with the gathered information.

POSLC-3

Error Message %POSLC-3-HWERROR: [chars]

Explanation The Optical Services Module has encountered a hardware 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 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 %POSLC-3-PROCESS_CREATEFAIL: [chars]

Explanation The PoS line card could not create a process required for its operation. This condition might be caused by a resource being unavailable.

Error Message %POSLC-3-PROCESS_TIMEREVENT: [chars]

Explanation An unexpected process timer event occurred in the Optical Services 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/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 %POSLC-3-UNEXPECTED_PROCESSEVENT: [chars]

Explanation An unexpected process event occurred in the Optical Services 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/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.

POT1E1 Messages

This section contains Versatile Interface Processor (VIP) Packet over T1 and E1 (POT1E1) port adapter messages.

POT1E1-1

Error Message %POT1E1-1-UNAVAILABLE: %s channel not disabled

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

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

Error Message %POT1E1-1-UNAVAILABLE: %s channel not enabled; called from function %s

Explanation A software or hardware error occurred. The POT1E1 serial interface is not responding to commands used to initialize it.

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

Error Message %POT1E1-1-UNAVAILABLE: Download failed

Explanation Microcode download to POT1E1 port adapter failed.

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

Error Message %POT1E1-1-UNAVAILABLE: Fail to configure %d interfaces on bay %d, shutting down bay

Explanation Cannot configure some interfaces on board

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

Error Message %POT1E1-1-UNAVAILABLE: Failed for bay %d, sent = 0x%x, received = 0x%x

Explanation The download of the internal firmware to the POT1E1 failed to checksum correctly. This usually indicates a hardware failure

Recommended Action Perform a power cycle. If the problem persists, the POT1E1 hardware may have a problem.

Error Message %POT1E1-1-UNAVAILABLE: Microcode download failed to complete

Explanation The POT1E1 hardware has failed. It could not download its operational microcode.

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

Error Message %POT1E1-1-UNAVAILABLE: Not ready for download.

Explanation Error on the communication path between DRIVER and POT1E1

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

Error Message %POT1E1-1-UNAVAILABLE: Slot %d: %s

Explanation The PRI port adaptor failed to complete hardware initialization.

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

Error Message %POT1E1-1-UNAVAILABLE: only found %d interfaces on bay %d, shutting down bay

Explanation Mismatched type or POT1E1 hardware failure

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

POT1E1-2

Error Message %POT1E1-2-NOACCPTR: VC=[dec] [chars]

Explanation The POT1E1 port adapter could not increment the pointer count.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the **show tech-support** and **show controllers vip** *slot-number* **tech-support** commands, with *slot-number* being the slot number where the POT1E1 port adapter resides. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 controllers vip slot-number tech-support commands, with slot-number being the slot number where the POT1E1 port adapter resides, and your pertinent

Error Message %POT1E1-2-NOINC: [chars]

troubleshooting logs.

Explanation The POT1E1 port adapter encountered a null access pointer while it was incrementing the pointer count.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the **show tech-support** and **show controllers vip** *slot-number* **tech-support** commands, with *slot-number* being the slot number where the POT1E1 port adapter resides. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 controllers vip** *slot-number* **tech-support** commands, with *slot-number* being the slot number where the POT1E1 port adapter resides, and your pertinent troubleshooting logs.

Error Message %POT1E1-2-QTAIL: Qhead=[hex] particle_count=[dec] size=[dec]

Explanation The POT1E1 port adapter encountered a null queue heading.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the **show tech-support** and **show controllers vip** *slot-number* **tech-support** commands, with *slot-number* being the slot number where the POT1E1 port adapter resides. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 controllers vip slot-number tech-support commands, with slot-number being the slot number where the POT1E1 port adapter resides, and your pertinent troubleshooting logs.

Error Message %POT1E1-2-TXBADVC: [chars], vc [dec]

Explanation The POT1E1 port adapter encountered a null queue heading.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the **show tech-support** and **show controllers vip** *slot-number* **tech-support** commands, with *slot-number* being the slot number where the POT1E1 port adapter resides. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 controllers vip slot-number tech-support commands, with slot-number being the slot number where the POT1E1 port adapter resides, and your pertinent

troubleshooting logs.

POT1E1-3

Error Message %POT1E1-3-FREEDMFATAL: Bay [dec]: freedm reset, command-status register [hex]

Explanation The POT1E1 port adapter has experienced a fatal problem related to the Frame Engine and Data Link Manager (FREEDM) ASIC.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %POT1E1-3-MBOXSEND: Bay [dec]: fail sending mbox msg [dec]

Explanation POT1E1 mailbox failed send

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

PPP Messages

This section contains Point-to-Point Protocol (PPP) messages.

PPP-3

Error Message %PPP-3-ISSU_ERR: [chars]

Explanation An error occurred during an ISSU versioning operation.

PQ3 Messages

This section contains Ethernet Phy messages.

PQ3 FE

Error Message %PQ3_FE-1-INITFAILP: PQ3/FE([dec]/[dec]), Init failed at [chars]

Explanation The FE could not allocate an I/O buffer pool.

Recommended Action Clear the interface. If the message recurs, call your technical support representative for assistance.

Error Message $PQ3_{FE-1-MACADDRFAIL}$: PQ3/FE([dec]/[dec]), Unable to set the Mac-address for the interface

Explanation The FEC could not set the mac address of the interface.

Recommended Action Clear the interface. If the message recurs, call your technical support representative for assistance.

Error Message %PQ3_FE-1-SHOWFAIL: PQ3/FE([dec]/[dec]), Memory error at [chars]

Explanation The FEC could not allocate memory to display controller.

Recommended Action Clear the interface. If the message recurs, call your technical support representative for assistance.

Error Message %PQ3_FE-2-NOISL: Interface [chars] does not support ISL

Explanation The interface cannot be configured as an ISL trunk.

Recommended Action Check the configuration.

Error Message %PQ3_FE-3-OVERFLO: PQ3/FE([dec]), Receive overflow

Explanation While receiving a frame, the controller chip's local buffer transmitted insufficient data because data could not be transferred to DRAM fast enough to keep pace with its input rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

Recommended Action The system should recover. No action is required.

Error Message %PQ3_FE-3-UNDERFLO: PQ3/FE([dec]), Transmit underflow

Explanation While transmitting a frame, the controller chip's local buffer received insufficient data because data could not be transferred to the chip fast enough to keep pace with its output rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

Recommended Action The system should recover. No action is required.

Error Message %PQ3_FE-4-BABBLE: PQ3/FE([dec]/[dec]), Babble error, CSR[dec]=[hex]

Explanation The transmitter has been on the channel longer than the time taken to transmit the largest frame.

Recommended Action The system should recover. No action is required.

Error Message %PQ3_FE-5-EXECOLL: PQ3/FE([dec]/[dec]), Excessive collision

Explanation Excessive collisions occurred on the Fast Ethernet interface.

Recommended Action No action is required.

Recommended Action

Error Message %PQ3_FE-5-LATECOLL: PQ3/FE([dec]/[dec]), Late collision

Explanation Late collisions occurred on the Fast Ethernet interface.

Recommended Action If the interface is Fast Ethernet, verify that both peers are in the same duplex mode. No action is required.

Error Message %PQ3_FE-5-LOSTCARR: PQ3/FE([dec]/[dec]), Lost carrier. Transceiver
problem?

Explanation The cable and/or transceiver is not connected.

Recommended Action Connect the cable and/or transceiver.

PQ3 TSEC

Error Message %PQ3_TSEC-1-INITFAIL: PQ3/FE([dec]), Init failed, CSR[dec]=[hex]

Explanation The software failed to initialize/restart an Ethernet/Fast Ethernet interface.

Recommended Action Clear the interface. If the message recurs, call your technical support representative for assistance.

Error Message %PO3 TSEC-1-INITFAILP: PO3/FE([dec]), Init failed at [chars]

Explanation The FEC could not allocate a I/O buffer pool.

Recommended Action Clear the interface. If the message recurs, call your technical support representative for assistance.

Error Message %PQ3_TSEC-1-MEMERR: PQ3/FE([dec]), Memory error, CSR[dec]=[hex]

Explanation The interface could not access system resources for a long time. This problem may occur under very heavy loads.

Recommended Action The system should recover. No action is required. If the message recurs, call your technical support representative for assistance.

Error Message %PQ3_TSEC-1-SHOWFAIL: PQ3/FE([dec]), Memory error at [chars]

Explanation The FEC could not allocate memory to display controller.

Recommended Action Clear the interface. If the message recurs, call your technical support representative for assistance.

Error Message %PQ3_TSEC-2-NOISL: Interface [chars] does not support ISL

Explanation The interface cannot be configured as an ISL trunk.

Recommended Action Check the configuration.

Error Message %PQ3_TSEC-3-OVERFLO: PQ3/FE([dec]), Receive overflow

Explanation While receiving a frame, the controller chip's local buffer transmitted insufficient data because data could not be transferred to DRAM fast enough to keep pace with its input rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

Recommended Action The system should recover. No action is required.

Error Message %PQ3_TSEC-3-OWNERR: PQ3/FE([dec]), Buffer ownership error, pak=[hex]

Explanation The software detected an error in descriptor ownership.

Recommended Action Try a later version of the software. If the message recurs, call your technical support representative for assistance.

Error Message %PQ3_TSEC-3-UNDERFLO: PQ3/FE([dec]), Transmit underflow

Explanation While transmitting a frame, the controller chip's local buffer received insufficient data because data could not be transferred to the chip fast enough to keep pace with its output rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

Recommended Action The system should recover. No action is required.

Error Message %PQ3_TSEC-4-BABBLE: PQ3/FE([dec]), Babble error, CSR[dec]=[hex]

Explanation The transmitter has been on the channel longer than the time taken to transmit the largest frame.

Recommended Action The system should recover. No action is required.

Error Message %PQ3_TSEC-5-COLL: PQ3/FE([dec]), Excessive collisions, TDR=[dec],
TRC=[dec].

Explanation Ethernet/Fast Ethernet is seeing multiple collisions. This may occur under heavy loads.

Recommended Action The system should recover. No action is required.

Error Message %PQ3_TSEC-5-EXCESSCOLL: PQ3/FE([dec]), Excessive collision

Explanation Ethernet/Fast Ethernet is seeing multiple collisions. This may occur under heavy loads.

Recommended Action The system should recover. No action is required.

Error Message %PQ3_TSEC-5-LATECOLL: PQ3/FE([dec]), Late collision

Explanation Late collisions occurred on the Ethernet/Fast Ethernet interface.

Recommended Action If the interface is Fast Ethernet, verify that both peers are in the same duplex mode. For regular Ethernet, the system should recover. No action is required.

Error Message %PQ3_TSEC-5-LOSTCARR: PQ3/FE([dec]), Lost carrier. Transceiver
problem?

Explanation The cable is not connected to the port.

Recommended Action Connect the cable to the port.

PQUICC3 Messages

PQUICC3-1

Error Message %PQUICC3-1-BADHDXFSM: PQUICC3([dec]/[dec]), Unexpected HDX state
[dec], event [dec]

Explanation A bad event was detected in the state machine for half duplex transmission/reception.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

Error Message %PQUICC3-1-CTSLOST: PQUICC3([dec]/[dec]), Clear to Send Lost

Explanation The Clear To Send (CTS) input signal on a data terminal equipment (DTE) serial interface became inactive while transmitting a frame. This problem is a result of a communication line failure or cable disconnection.

Recommended Action Check the serial interface cable and/or communication equipment, such as the channel service unit/data service unit (CSU/DSU).

Error Message %PQUICC3-1-INITFAIL: PQUICC3([dec]/[dec]), SCC[dec] init failed

Explanation The software failed to initialize/restart a 1T serial card.

Recommended Action Clear the serial interface. If the message recurs, call your technical support representative for assistance.

 $\textbf{Error Message} \ \, \text{%PQUICC3-1-LINEFLAP: PQUICC3([dec]/[dec]), Excessive modem control changes} \\$

Explanation The system received too many modem control signal interrupts. Modem control signals are hardware handshake signals between data terminal equipment (DTE) and data communications equipment (DCE). The signals include either a data carrier detect (DCD) or a data set ready (DSR), or both DCD and DSR.

Recommended Action Check the serial interface cable. The error can occur if the cable is disconnected or has come loose and is picking up noise. If the cable appears to be connected correctly, check the equipment connected to the cable.

Error Message %POUICC3-1-NOMEMORY: Unit [dec], no memory for [chars]

Explanation The MPC8500/PowerQUICC CPU was unable to access the memory it needs to carry out its functions. Here are some possible causes.

- The network is large, requiring a lot of memory for routing tables, etc.
- The router configuration has many features enabled, each of which requires memory.
- A software error (memory leak) exists.

Recommended Action Reduce system activity to ease the memory demand, or upgrade to a larger memory configuration.

Error Message %PQUICC3-1-QMC_GLOBAL_ERROR: PQUICC3([dec]/[dec]), Global error [hex]
in QMC

Explanation One or more of the channels served by the QMC instance encountered transmitter underflow or receiver overflow or the QMC interrupt table overflowed. Normally, such a problem is temporary, depending on transient peak loads within the system.

Recommended Action The system should recover. No action is required.

Error Message %PQUICC3-1-TOOBIG: PQUICC3([dec]/[dec]), packet too big, packet size
was [dec] bytes

Explanation A packet greater than the assigned MTU of this serial interface was queued up for transmission.

Recommended Action The system should recover. No action is required. If the message recurs, it may indicate an error related to data traffic patterns. 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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

 $\label{lem:condition} \textbf{Error Message} \ \text{$PQUICC3-1-TOOSMALL:} \ PQUICC3([dec]/[dec]), \ packet \ was \ less \ than \ 2 \ bytes, \ packet \ size \ was \ [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. No action is required. If the message recurs, it may indicate a hardware error related to data traffic patterns, 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 tech-support** 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/cgi-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/launch.do, or contact your Cisco technical support.

Error Message %PQUICC3-1-UNDERFLO: PQUICC3([dec]/[dec]), Transmit underflow

Explanation While transmitting a frame, the serial controller chip's local buffer received insufficient data because data could not be transferred to the chip fast enough to keep pace with its output rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

Recommended Action The system should recover. No action is required.

Error Message %PQUICC3-1-UNEXPECTED_INTERRUPT: PQUICC3([dec]), Unexpected
modem-signal interrupt

Explanation The software did not expect to see a modem control signal change on this interface.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

Error Message %PQUICC3-1-WRONG_SLOT: PQUICC3([dec]), BRI card in wrong slot(1)

Explanation The BRI card is not supported in WIC slot 0.

Recommended Action Power down, move the BRI card to the other WIC slot on the port module and reboot.

PQUICC3-3

Error Message %PQUICC3-3-OWNERR: Unit [dec], buffer ownership error, pak = [hex]

Explanation An internal software error occurred.

Recommended Action Call your technical support representative to obtain a software upgrade.

Error Message %PQUICC3-3-SPURIOUS_INTERRUPT: Interface card in slot [dec] generated
a spurious interrupt

Explanation Interface card on the router which is not supported by this image generated a spurious interrupt that can not be handled.

Recommended Action No action is required. To avoid seeing this message in the future, remove the unsupported card or use an image that supports it.

Error Message %PQUICC3-3-UNKNOWN_SCCS: PQUICC3, Incorrect SCC number

Explanation An internal software error occurred.

Recommended Action Call your technical support representative to obtain a software upgrade.

Error Message %PQUICC3-3-UNKNOWN_SCC_TX_VECTOR: PQUICC3, Unknown TX vector on port
[dec]

Explanation An internal software error occurred.

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 tech-support 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/cgi-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/launch.do, or contact your Cisco technical support.

 $\label{lem:condition} \textbf{Error Message} \ \ \texttt{PQUICC3-1-UNKNOWN_WIC:} \ \ \texttt{PQUICC3([dec]), WIC card has an unknown ID of [hex]}$

Explanation The software does not recognize the type of WIC card plugged into the port module.

Recommended Action Check the part number on the WIC card to verify that it is supported in the IOS release operational on the router or contact your technical support representative.

Error Message %PQUICC3-1-UNSUPPORTED_CONFIG: Slot [dec] has an unsupported combination of ISDN WAN interface cards

Explanation It is not possible to support this type of BRI card in slot 1 along with another BRI card in slot 0.

Recommended Action Remove one of the BRI cards from either slot.

PRBS Messages

This section contains Manhattan Pseudo-Random Bit Sequence (PRBS) related messages.

PRBS-5

Error Message %PRBS-5-DECERR: Slot:[dec],Subcard:[dec],Port:[dec] Decoding error
[dec] at time [dec] sec.

Explanation A 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 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 %PRBS-5-GETARGERR: process_get_arg_num error.

Explanation A 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 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 %PRBS-5-LOSSLOCK: Slot:[dec],Subcard:[dec],Port:[dec] Loss of Lock at time [dec] sec.

Explanation A software error occurred.

Error Message %PRBS-5-PASSED: Slot:[dec],Subcard:[dec],Port:[dec] [dec] sec PRBS
test passed.

Explanation A PBRS test was successful.

Recommended Action No action is required.

Error Message %PRBS-5-STATUSERR: Slot:[dec],Subcard:[dec],Port:[dec] at [dec] sec status error [dec], quit.

Explanation A 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 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 %PRBS-5-STOP: Slot:[dec],Subcard:[dec],Port:[dec] PRBS test stop at
[dec] sec.

Explanation A PBRS test stopped.

Recommended Action No action is required.

PROCYON Messages

This section contains messages for the CPU daughter card for the Supervisor Engine 720 (PROCYON).

PROCYON-3

Error Message %PROCYON-3-CREATE_IBC_FAILED: Creation of procyon ibc idb failed

Explanation The creation of an inband control interface description block for the CPU daughter card has failed. The software or the hardware is faulty.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PROCYON-3-INIT_IBC_FAILED: Initialization of procyon ibc failed

Explanation Inband control initialization has failed. The software or the hardware is faulty.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PROCYON-3-INIT_ICDM_FAILED: Initialization of icdm driver failed

Explanation The ICDM driver initialization failed for the CPU daughter card inband control. The software or the hardware is faulty.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PROCYON-3-INIT_MAC_DRIVER_FAILED: Initialization of ethernet mac driver failed

Explanation The Ethernet MAC driver initialization failed for the CPU daughter card inband control. The software or the hardware is faulty.

Error Message %PROCYON-3-MASKED_RCV_INTR: procyon_ibc_rcv_interrupt called while
masked: [int]

Explanation The CPU received an inband interrupt, although the inband interrupt was masked. The software or the hardware is faulty.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PROCYON-3-NO_BUFFER_POOLS: Initialization of private buffer pools
failed

Explanation Private buffer pools were not created for the CPU daughter card inband control. This condition can occur during periods of extreme traffic.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PROCYON-3-NO_PARTICLE: no particle available to populate the ethernet dma ring

Explanation No particle was available to populate the direct memory access of the Ethernet ring. This condition can occur during periods of extreme traffic.

Explanation A particle was not added to the direct memory access of the Ethernet ring. The software or the hardware is faulty.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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.

PROCYON_ION_INTR Messages

This section contains messages for the CPU daughter card for the Supervisor Engine 720 (PROCYON).

PROCYON_ION_INTR-3

Error Message %PROCYON_ION_INTR-3-ENABLE_INTR_REGISTER_ACCESS_FAILED: Access to interrupt registers failed

Explanation A failure occurred in accessing interrupt registers.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %PROCYON_ION_INTR-3-ENABLE_KERNEL_MODE_FAILED: Access to kernel mode
failed

Explanation A failure occurred in accessing kernel mode.

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 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 %PROCYON_ION_INTR-3-INTERRUPT_UNMASK_FAILED: Interrupt unmask failed: interrupt_source [dec]

Explanation A failure occurred in unmasking interrupts.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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.

PRST_IFS Messages

This section contains persistent media IOS file system (IFS) messages.

PRST_IFS-3

Error Message %PRST_IFS-3-FILE: persistent media IFS file error: %s

Explanation An error occurred in a persistent media module (IOS file system) file.

Error Message %PRST_IFS-3-FILEMEM: No memory to update %s. Please free some space

Explanation There is no file system memory for the system to write an updated version of the persistent variable file.

Recommended Action Free space on the file system shown in the error message as soon as possible. You must delete existing files or squeeze the file system if the file system requires it (bootflash, for example, may require it).

Error Message %PRST_IFS-3-GENERAL: persistent media IFS general error: %s

Explanation An error occurred in the persistent media module (IOS file 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/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 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.

PRST_VBL Messages

This section contains persistent variable messages.

PRST VBL-3

Error Message %PRST_VBL-3-GENERAL: Persistent general error: %s

Explanation A general error related to a persistent variable occurred.

Error Message %PRST_VBL-3-MEDIA: Persistent media error: %s

Explanation A media error related to a persistent variable 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 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.

PT Messages

This section contains Protocol Translation messages.

Error Message %PT-3-PT_HW_UNAVAIL: Protocol Tunneling hardware resource not available. [chars]

Explanation Protocol tunneling could not be enabled because no redirect registers are available. Protocol tunneling requires redirect registers.

Recommended Action Disable any applications that use redirect registers and configure the protocol tunneling again.

Error Message %PT-3-PT_NO_SWSB: Protocol Tunneling software subblock not found.
[chars]

Explanation The software subblock that is used for protocol tunneling could not be found for the port specified in the message text. Protocol tunneling has been disabled on this port.

PXF Messages

This section contains Parallel eXpress Forwarding (PXF) messages.

Error Message %PXF-2-DWNLOADCOLROW: Could not download the microcode into PXF processor @ column [dec] row [dec].

Explanation A problem occurred that prevented the microcode from being downloaded to PXF. This could be either a software or hardware abnormality.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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.

PXF_ACL Messages

This section contains Parallel eXpress Forwarding (PXF) ACL-specific messages.

PXF ACL-3

Error Message %PXF_ACL-3-WS_ACL_CONTEXT_EVENT: [chars] [chars]

Explanation An invalid turbo ACL context has been used to call a block initialization. This condition is possibly caused by a process-level watchdog that has timed out.

Error Message %PXF_ACL-3-WS_ACL_EVENT: [chars]

Explanation PXF turbo ACL errors have 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 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 %PXF_ACL-3-WS_ACL_PXF_CONTEXT_EVENT: [chars] [chars]

Explanation An invalid PXF turbo ACL context has been used to call a block initialization. This condition is possibly caused by a process-level watchdog that has timed out.

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 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.

PXFAPI Messages

This section contains Parallel eXpress Forwarding (PXF) API-related messages.

PXFAPI-3

Error Message %PXFAPI-3-TIFBAD: TIF [int] is not available or invalid.

Explanation The PXF interface instance that was requested is not available 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/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 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 %PXFAPI-3-TIFINUSE: Request for in-use reserved TIF [int]

Explanation A PXF interface instance was requested but is currently reserved as it is still in use.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %PXFAPI-3-TIFNODETACH: TIF [int] could not be detached.

Explanation The PXF interface instance could not be detached.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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.

PXF_FIB Messages

This section contains Parallel eXpress Forwarding (PXF) Forwarding Information Base (FIB) messages.

PXF FIB-3

```
Error Message %PXF_FIB-3-WS_FIB_RW_EVENT: [chars] [dec] [chars]
```

Explanation The Layer 2 information for this interface is not consistent in PXF. The router may resume normal operation after this message.

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 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 %PXF_FIB-3-WS_FIB_TIF_EVENT: [chars] [chars]

Explanation The interface does not have a valid PXF handle attached to it. The router may resume normal operation after this message.

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 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.

PXF_FLOW Messages

This section contains Parallel eXpress Forwarding (PXF) NetFlow messages.

PXF_FLOW-4

Error Message %PXF_FLOW-4-INVLDAGG_SINGLE: The netflow aggregation scheme is not supported in PXF. This interface will be marked as unsupported by the PXF, all incoming traffic to this interface will be processed in the RP.

Explanation The only NetFlow aggregation schemes supported in the PXF are AS aggregation, proto port aggregation, source prefix aggregation, and destination aggregation.

Error Message %PXF_FLOW-4-NO_INVLDAGG: All previously configured unsupported netflow aggregations have been disabled or removed. Netflow enabled interfaces may however still be marked unsupported due to other unsupported features configured.

Explanation Only PXF-supported NetFlow aggregation schemes are configured, or possibly no NetFlow aggregation schemes are configured.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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.

PXF_GRE Messages

This section contains Parallel eXpress Forwarding (PXF) GRE tunnel-related messages.

PXF GRE-3

Error Message %PXF_GRE-3-PXF_MEM_ERR_CLR_TSTATS: PXF MEM ERROR when clearing PXF
tunnel stats (Addr=[hex])

Explanation An error occurred when clearing the tunnel statistics from PXF memory. The tunnel statistics could not be properly cleared.

Error Message %PXF_GRE-3-PXF_MEM_ERR_HINFO: PXF MEM ERROR when downloading tunnel
hash info to PXF (Addr=[hex])

Explanation An error occurred when writing into PXF memory. Tunnel hash information could not be properly downloaded 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. 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 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 %PXF_GRE-3-PXF_MEM_ERR_HTIFS: PXF MEM ERROR when downloading tunnel
hashed tifs to PXF (Addr=[hex])

Explanation An error occurred when writing into PXF memory. Hashed tunnel TIFs could not be properly downloaded 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. 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 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 %PXF_GRE-3-PXF_MEM_ERR_READ_TSTATS: PXF MEM ERROR when reading PXF
tunnel stats (Addr=[hex])

Explanation An error occurred when reading the tunnel statistics from PXF memory. The tunnel statistics could not be properly read.

Error Message %PXF_GRE-3-PXF_MEM_ERR_TID: PXF MEM ERROR when downloading tunnel id
to PXF (Addr=[hex])

Explanation An error occurred when writing into PXF memory. The tunnel ID could not be properly downloaded 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. 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 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 %PXF_GRE-3-PXF_MEM_ERR_TVRF: PXF MEM ERROR when downloading tunnel vrf
to PXF (Addr=[hex])

Explanation An error occurred when writing into PXF memory. The tunnel VRF could not be properly downloaded 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. 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 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.

PXF GRE-4

Error Message %PXF_GRE-4-PXF_MEM_ERR: Memory allocation error while [chars]

Explanation An error has occurred while allocating memory. PXF could not process tunneled packets properly.

PXF_MPLS_TE Messages

This section contains Parallel eXpress Forwarding (PXF) MPLS traffic engineering (TE) messages.

PXF MPLS TE-3

Error Message %PXF_MPLS_TE-3-PXF_MEM_ERR_CLR_TSTATS: PXF MEM ERROR when clearing PXF
tunnel stats (Addr=[hex])

Explanation An error occurred when tunnel statistics were being cleared from PXF memory. The tunnel statistics could not be properly cleared.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %PXF_MPLS_TE-3-PXF_MEM_ERR_LKUP_TABLE: PXF MEM ERROR when downloading
TE tunnel look-up table to PXF (Addr=[hex])

Explanation An error occurred while information was being written into PXF memory. The lookup table could not be properly downloaded 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. 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 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 %PXF_MPLS_TE-3-PXF_MEM_ERR_READ_TSTATS: PXF MEM ERROR when reading PXF
tunnel stats (Addr=[hex])

Explanation An error occurred while tunnel statistics were being read from PXF memory. The tunnel statistics could not be properly read.

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 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.

PXF_MPLS_TE-4

Error Message %PXF_MPLS_TE-4-PXF_MEM_ERR: Memory allocation error while [chars]

Explanation An error has occurred while allocating memory. PXF could not process a tunneled packet 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/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 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.

PXF_QOS Messages

This section contains Parallel eXpress Forwarding (PXF) Quality of Service (QoS) messages.

PXF QOS-3

Error Message %PXF_QOS-3-UNAVAILABLE: Cannot %s actual QoS statistics generation in PXF

Explanation An error occurred when enabling or disabling QoS Statistic Generation.

Error Message %PXF_QOS-3-UNAVAILABLE: Error attaching %s service-policy PXF data to
%s: %s

Explanation The assignment of the PXF portion of the service-policy data to a sub-interface has failed. This means that, even though the configuration shows that the service-policy is attached to the sub-interface, the download of the necessary PXF data has not occurred. Because of that, the service-policy will not be effective on the sub-interface.

Recommended Action Detach and reattach the service-policy to the sub-interface. Also: Copy the message exactly as it appears on the 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 %PXF_QOS-3-UNAVAILABLE: PXF MEM ERROR when attaching service policy in PXF (Addr=0x%08x)

Explanation An error occurred when reading from or writing to PXF memory. Service policy-map could not be properly attached to interface in 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. 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 %PXF_QOS-3-UNAVAILABLE: PXF MEM ERROR when clearing a WRED counter in PXF (Addr=0x*08x)

Explanation An error occurred when writing to PXF memory. PXF WRED counter could not be properly cleared.

Error Message $PXF_QOS-3-UNAVAILABLE: PXF MEM ERROR when detaching CBWFQ from an interface in PXF (Addr=<math>0x*08x$)

Explanation An error occurred when reading from or writing to PXF memory. CBWFQ could not be properly detached from interface in 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. 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 %PXF_QOS-3-UNAVAILABLE: PXF MEM ERROR when detaching service policy in PXF (Addr=0x%08x)

Explanation An error occurred when reading from or writing to PXF memory. Service policy-map could not be properly detached from interface in 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. 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 $PXF_QOS-3-UNAVAILABLE: PXF MEM ERROR when downloading CBWFQ parameters to PXF (Addr=<math>0x$ %08x)

Explanation An error occurred when reading from or writing to PXF memory. CBWFQ parameters could not be properly downloaded to PXF.

Error Message %PXF_QOS-3-UNAVAILABLE: PXF MEM ERROR when downloading QoS
classification entry to PXF (Addr=0x%08x)

Explanation An error occurred when reading from or writing to PXF memory. QoS classification entry could not be properly downloaded 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. 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 %PXF_QOS-3-UNAVAILABLE: PXF MEM ERROR when downloading WRED parameters
to PXF (Addr=0x%08x)

Explanation An error occurred when reading from or writing to PXF memory. WRED parameters could not be properly downloaded 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. 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 %PXF_QOS-3-UNAVAILABLE: PXF MEM ERROR when downloading marking parameters to PXF (Addr=0x%08x)

Explanation An error occurred when reading from or writing to PXF memory. 'set' command parameters could not be properly downloaded to PXF.

Error Message %PXF_QOS-3-UNAVAILABLE: PXF MEM ERROR when downloading policing
parameters to PXF (Addr=0x%08x)

Explanation An error occurred when reading from or writing to PXF memory. Police parameters could not be properly downloaded 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. 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 %PXF_QOS-3-UNAVAILABLE: PXF MEM ERROR when downloading priority parameters to PXF (Addr=0x%08x)

Explanation An error occurred when reading from or writing to PXF memory. 'priority' command parameters could not be properly downloaded 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. 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 $PXF_QOS-3-UNAVAILABLE: PXF MEM ERROR when reading a WRED counter from PXF (Addr=<math>0x*08x$)

Explanation An error occurred when reading from PXF memory. PXF WRED counter could not be properly read (0 value assumed).

Error Message %PXF_QOS-3-UNAVAILABLE: PXF MEM ERROR when setting CBWFQ up in an interface in PXF (Addr=0x%08x)

Explanation An error occurred when reading from or writing to PXF memory. CBWFQ could not be properly set up in interface in 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. 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 %PXF_QOS-3-UNAVAILABLE: Too many configured policy-maps (%d) for current number ofTurboACL classification outcomes (%d).

Explanation QoS PXF Classification Engine (based on turbo acl): due to thecurrent number of possible outcomes of the turbo acl compilation, there is not enough memory to hold new policy-maps.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PXF_QOS-3-UNAVAILABLE: Too many possible turbo acl outcomes (%d) for current number ofconfigured policy-maps (%d).

Explanation QoS PXF Classification Engine (based on turbo acl): due to thecurrent number of policy-maps, there is not enough memory tohold all possible outcomes of the turbo acl compilation.

Error Message %PXF_QOS-3-UNAVAILABLE: Too many possible turbo acl outcomes: %d (max policies: %d).

Explanation QoS PXF Classification Engine (based on turbo acl): there is not enough memory to hold all possible outcomes of the turbo acl compilation.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %PXF_QOS-3-UNAVAILABLE: Unknown QoS action type: 0x%x.

Explanation A QoS feature, unrecognized by PXF, has been configured with the Modular QoS CLI. The feature will work but excessive punting may occur if the feature is on an output 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 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 %PXF_QOS-3-UNAVAILABLE: VTMS will not work correctly. Use hierarchical policy-map for this interface.

Explanation This interface does not have a configured link bandwidth. A linkbandwidth is required for VTMS to operate correctly

PXF VRFS-3

Error Message %PXF_VRFS-3-UNAVAILABLE: %s

Explanation Generic PXF VRFS errors

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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.

QM Messages

This section contains Quality of Service Management (QM) messages.

0A-3

Error Message %QA-3-UNAVAILABLE: %s

Explanation This is a software error.

Recommended Action Copy the error message exactly as it appears. Also copy the output of show version and show cont cbus. Contact your technical support representative.

Error Message %QA-3-UNAVAILABLE: NULL

Explanation This is a diagnostic message.

Recommended Action This message appears after a QA error, and contains diagnostic information regarding that error. Copy the original QA error message and all the following QA diagnostic error messages exactly as they appear. Also copy the output of show version and show cont cbus. Contact your technical support representative.

QATM-2

Error Message %QATM-2-UNAVAILABLE: Cannot read TCAM

Explanation Possibly bad hardware

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %QATM-2-UNAVAILABLE: Cannot read TCAM associated data

Explanation Possibly bad hardware

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %QATM-2-UNAVAILABLE: Cannot write TCAM associated data

Explanation Possibly bad hardware

Error Message %QATM-2-UNAVAILABLE: Cannot write the TCAM

Explanation Possibly bad hardware

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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.

QEM-3

Error Message %QEM-3-UNAVAILABLE: Found %s switch processors

Explanation The QEM driver found either no switch processors or more than one. Exactly one is the only supported configuration.

Recommended Action Make sure there is only one switch processor.

0M-2

Error Message %QM-2-CONFORM_ACTION_NE: Different aggregate and microflow conform-action in class [chars][policy [chars]]

Explanation Conform actions in the **police** and **police flow** commands must be the same for the same class in a service-policy applied to MLS interfaces.

Recommended Action Change the conform-action in the **police** or **police flow** command to make both actions the same, or remove one of the two commands.

Error Message %QM-2-MERGE_ERROR: ACL merge error for Interface [chars] in [chars] direction status [dec]

Explanation The ACL merge failed before programming ACLs into the 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/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 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 %QM-2-PLC_ATTACH_REJECT_2_PLCRS: Command rejected: (policy [chars] interface [chars] dir [chars]) police and police aggregate commands present in same traffic class

Explanation One of two conditions has occurred: either a policy map that contains a traffic class with both **police** and **police** aggregate commands is attached to an unsupported interface or a policy attached to an interface is being modified in an unsupported manner.

Recommended Action Remove the unsupported command combination from the same traffic class. In the case of a modification to a policy that is already attached to unsupported interfaces, no action is required because the command is automatically rejected.

Error Message %QM-2-PLC_ATTACH_REJECT_ARP_UFLOW: Command rejected: (policy-map [chars] class [chars] interface [chars] dir [chars]) flow policer is not supported for traffic classes matching ARP ACL.

Explanation In a policy map, flow policer is not supported if the traffic class is matching ARP ACL.

Recommended Action Remove the flow policer from traffic class matching ARP ACL and reattach the policy or change the traffic class to match non-ARP ACL and configure flow policer.

Error Message %QM-2-PLC_ATTACH_REJECT_IPX_PROTO: Command rejected: (policy-map %s class %s) IPX access-list is not supported in EARL7.

Explanation In a class map, an IPX access list is not supported in the match criteria.

Recommended Action Remove the IPX access list from the traffic class match criteria and reattach the policy, or change the traffic class to match a non-IPX ACL.

Error Message %QM-2-PLC_ATTACH_REJECT_SET: Command rejected: (policy [chars]
interface [chars] dir [chars]) police/trust and set commands present in same
traffic class

Explanation One of two conditions has occurred: either a policy map that contains a traffic class with both **set** and **police/trust** commands is attached to an unsupported interface or a policy attached to an interface is being modified in an unsupported manner.

Recommended Action Remove the unsupported command combination from the same traffic class. In the case of a modification to a policy that is already attached to unsupported interfaces, no action is required because the command is automatically rejected.

Error Message $QM-2-SET_IP_AND_MPLS$: Hardware does not support 'set mpls exp' and 'set precedence | dscp' together

Explanation The hardware does not support the **set mpls exp** and **set precedence** | **dscp** commands together.

Recommended Action Use either the set mpls exp or the set precedence | dscp command.

Error Message %QM-2-TCAM_ENTRIES_EXCEEDED: ACL merge failed, ACEs exceed TCAM capacity or 0 ACES, [dec] ACEs for interface [chars] in [chars] direction

Explanation The ACL merge was halted. The results of the ACL merge have caused the number of ACEs to exceed the TCAM capacity, or zero ACEs were present.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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.

0M-4

 $\textbf{Error Message} ~ \texttt{QM-4-AGG_POL_EXCEEDED:} ~ QoS ~ Hardware ~ Resources ~ Exceeded : Out of ~ Aggregate policers$

Explanation The supported number of aggregate policers has been exceeded. On EARL 7-based switches, this limit is 1023.

Recommended Action Attempt to aggregate policers if possible.

Explanation Policing of fragment offset == 1 (FO1) packets through switch ports will be supported only if the port is in VLAN-based mode, because FO1 policing is a Layer 3 feature.

Recommended Action Enter the **mls qos vlan based** command on the switch port.

Explanation The supported number of microflow policers has been exceeded. On EARL7-based switches, this limit is 63.

Recommended Action No action is required.

Error Message %QM-4-TCAM_MASK: Hardware TCAM mask entry capacity exceeded

Explanation The hardware TCAM does not have the mask capacity to handle all of the configured ACLs.

Recommended Action Because the configured ACLs are too large to all fit in the hardware TCAM, try to share the same ACLs across multiple interfaces in order to reduce TCAM resource contention.

Explanation An unexpected internal QoS condition has occurred. QoS debug may be enabled to obtain more information in case the condition recurs.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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.

QM-6

Error Message %QM-6-EOM_FORCE_TRUSTED: EOMPLS on [chars] caused install of 'trust cos' state

Explanation If EoMPLS is configured on the interface or any of its subinterfaces, the no trust state is automatically replaced by the trust CoS state.

Recommended Action Remove all EoMPLS configurations from the interface to restore the no trust state.

Error Message $QM-6-EOM_RESTORE_UNTRUSTED$: The 'no trust' state is restored on EoMPLS removal from [chars]

Explanation If EoMPLS is unconfigured on the interface and all its subinterfaces, the no trust state is restored.

Recommended Action No action is required.

Error Message %QM-6-EOM_TRUST_NOT_INSTALLED: 'no trust' command is not installed on
[chars] in presence of EoMPLS

Explanation If EoMPLS is configured on the interface or any of its subinterfaces, the **no trust** command is not installed.

Recommended Action Remove all EoMPLS configurations from the interface.

Error Message %QM-6-IOS_AND_PS_FEATURE: [chars] action cannot be present in classmap [chars] of policymap [chars] because this service-policy cannot be executed in Cat6K HW due to the presence of filters which require packets to be processed in IOS SW

Explanation NBAR is required for the match protocol commands used. NBAR exists only in software. Hardware-specific actions cannot be supported.

Recommended Action Remove either the hardware-specific command(s) or the match protocol criteria in class map.

Error Message %QM-6-NBAR_DISABLED: Packets will not be software switched.

Explanation NBAR is disabled so traffic will not be redirected to the RP.

Recommended Action No action is required.

Error Message %QM-6-NBAR_ENABLED: Packets will be software switched.

Explanation NBAR is enabled so all the traffic will be redirected to the RP.

Recommended Action No action is required.

Error Message %QM-6-SET_AND_POLICE: 'set' and 'police' commands cannot co-exist in classmap [chars] of policymap [chars]

Explanation The **set** and **police** commands cannot coexist in a class map for a QoS manager (QM) supported interface.

Recommended Action Choose one of the commands or use the **set-dscp-transmit** | **set-precedence-transmit** | **set-exp** option for the conform action of the **police** command.

Error Message %QM-6-SET_AND_TRUST: 'set' and 'trust' commands cannot co-exist in
classmap [chars] of policymap [chars]

Explanation The **set** and **trust** commands cannot coexist in a class map for a QoS manager (QM) supported interface.

Recommended Action Choose one of the commands.

Error Message %QM-6-SHAREDAG_AND_POLICE: 'police aggregate' and regular 'police'
commands cannot co-exist in classmap [chars] of policymap [chars]

Explanation The **set** and **police** commands cannot coexist in a class map for a QoS manager (QM) supported interface.

Recommended Action Choose one of the commands or use the **set-dscp-transmit** | **set-precedence-transmit** | **set-exp** option for the conform action of the **police** command.

Error Message %QM-6-TRUST_AND_POLICE: 'trust' and 'police/police aggregate with a set' cannot co-exist in classmap %s of policymap %s

Explanation The **trust** command and the **police** (or **police aggregate**) command with **set** statements cannot coexist in a class map for a QoS manager (QM) supported interface.

Recommended Action Remove the set statements in the police or police aggregate command.

Error Message %QM-6-UNDEF_SHR_AG: shared aggregate policer [chars] used in classmap [chars] of policymap [chars] is not defined

Explanation Shared aggregate policers have to be created first by entering the **mls qos aggregate** command before being used in a policy map.

Recommended Action Either define the shared aggregate policer or do not use it in the policy map.

QLLC-3

Error Message %QLLC-3-UNAVAILABLE: %e - Different partner - originally %e - now %e

Explanation The partner for this QLLC virtual MAC address does not match the MAC address that was defined with the qllc partner command.

Recommended Action Verify that the qllc partner statement in the configuration file is correct.

Error Message %QLLC-3-UNAVAILABLE: %s

Explanation An I-Frame was discarded due to network congestion.

Recommended Action Verify that the LAN is not beaconing and that it is not in a congested state. Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message %QLLC-3-UNAVAILABLE: %s

Explanation The text string provided with this error message describes the specific QLLC problem.

Recommended Action Follow the instructions that appear with the error message. Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message %QLLC-3-UNAVAILABLE: %s ptr is null

Explanation The specified structure was not configured.

Recommended Action Confirm the configuration commands for the structure.

Error Message %QLLC-3-UNAVAILABLE: Bad opcode %04x from %e to %e

Explanation Either remote source-route bridging is incorrectly configured, or the other RSRB device is down.

Recommended Action Verify that remote source-route bridging is configured correctly with the right version of the IOS software.

Error Message %QLLC-3-UNAVAILABLE: Bad qllc state - %s - %e

Explanation An invalid LLC primitive was detected.

Recommended Action Verify that the Token Ring ports and any participating LAN devices are configured correctly.

Error Message %QLLC-3-UNAVAILABLE: Bad qllc state - %s

Explanation An invalid QLLC primitive was detected.

Recommended Action Verify that the partner QLLC device is configured correctly.

Error Message %QLLC-3-UNAVAILABLE: Bad qllc state - %s event - %s macaddr - %e

Explanation The LLC primitive specified placed the router in an invalid state.

Recommended Action Verify that the Token Ring ports and any participating LAN devices are configured correctly.

Error Message %QLLC-3-UNAVAILABLE: Couldn't make null xid - %e -%e

Explanation An attempt to create an IEEE XID failed.

Recommended Action Verify that the qllc partner statement in the configuration file is correct, and that the partner is on the desired LAN.

Error Message %QLLC-3-UNAVAILABLE: Couldn't make xid - %e -%e

Explanation The QLLC XID could not be forwarded to the LAN.

Recommended Action Verify that the qllc partner and the qllc xid commands are correct.

Error Message %QLLC-3-UNAVAILABLE: Incoming Call: Insufficient resources available

Explanation This message is reporting insufficient system memory.

Recommended Action Upgrade the memory.

Error Message QLLC-3-UNAVAILABLE: Incoming call: No QLLC Service Access Point Configured for x.25 subaddress %s

Explanation A remote X.25 device is calling the router for QLLC service using a subaddress that was not configured by the X.25 routing facility. The subaddress was not configured for QLLC service.

Recommended Action Correct the QLLC configuration. Configure only the subaddress on the QLLC service, not the complete X.121 address that the remote X.25 device uses.

Error Message %QLLC-3-UNAVAILABLE: Incoming call: No partner Mac Address configured
- X.25 subaddress %s

Explanation There is an incoming call, but a connection cannot be initiated to a partner since no partner is configured in a qllc dlsw command (for QLLC/DLSw+ only).

Recommended Action Configure a partner for the incoming calling (such as using the qllc dlsw partner command).

Error Message %QLLC-3-UNAVAILABLE: Incoming call: QLLC map entry not found

Explanation A software error in the router code occurred.

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

Error Message %QLLC-3-UNAVAILABLE: M bit Reassembly failed - couldn't allocate a packet

Explanation The router ran out of memory to allocate buffers.

Recommended Action Make sure that the router configuration is adequate for the service expected of it. You might want to tune the buffer pools, or upgrade to a larger router. At the very least, you will need more memory.

Error Message %QLLC-3-UNAVAILABLE: No QLLC Service Access Points defined

Explanation No QLLC services have been configured, even though the router will accept incoming calls for QLLC.

Recommended Action Configure the QLLC service required.

Error Message %QLLC-3-UNAVAILABLE: No lnx entry for macaddr %e

Explanation No virtual MAC address was defined for this interface.

Recommended Action Define the virtual MAC address, using either the x25 map qllc or the x25 pvc qllc command.

Error Message %QLLC-3-UNAVAILABLE: Not enough memory available

Explanation There is not enough memory in the system to complete this request.

Recommended Action Add more memory to the router. Otherwise, reduce the configuration or the load on the router.

Error Message %QLLC-3-UNAVAILABLE: Opcode %s is invalid

Explanation Either remote source-route bridging or local acknowledgment is configured incorrectly.

Recommended Action Verify that remote source-route bridging and local acknowledgment are configured correctly.

Error Message %QLLC-3-UNAVAILABLE: Outgoing call: Partner Mac Address %e doesn't match configured partner %e

Explanation A device tried to connect to a QLLC VMAC (from Token Ring, for instance), but the MAC address of that device does not match the partner in the qllc dlsw command.

Recommended Action Correct the QLLC configuration to match the right partner.

Error Message %QLLC-3-UNAVAILABLE: Pak enqueue failed

Explanation A packet was not sent to the LAN.

Recommended Action Verify that the LAN partner is configured correctly, and that the partner is on the desired LAN.

Error Message QLLC-3-UNAVAILABLE: Sna configuration error for %e: Lan device is PU2.1, X.25 device is PU2.0 (XID Format 1)

Explanation The IBM Gateway (3172) or front-end processor on the LAN is sending XID Format 3 which is used to communicate with PU2.1 devices. The X.25 device is a PU2.0 (3174) that is configured to send XID Format 1 messages. This is a very rare situation - for example, Revision A5.6 on, and C5.1 on the 3172. A likely cause is that the revision levels on the IBM equipment are incompatible.

Recommended Action Check the revision levels on the external equipment, and upgrade them if necessary.

Error Message %QLLC-3-UNAVAILABLE: Unable to open an 11c2 session

Explanation An LLC2 session could not be established with the destination MAC address.

Recommended Action Verify that the qllc partner statement in the configuration file is correct, and that the partner is on the desired LAN.

Error Message %QLLC-3-UNAVAILABLE: lnx_remove_macaddr_hash did not find target lnx

Explanation The qllc srb command was not defined for this interface.

Recommended Action Add a valid qllc srb statement for this serial interface.

QLLC-4

Error Message %QLLC-4-UNAVAILABLE: Unable to open qllc session, current state is %s

Explanation A QLLC session could not be established.

Recommended Action Verify that the qllc partner and the qllc xid commands are correct.

QNQ Messages

This section contains Q-in-Q (QnQ) messages.

Error Message %QNQ-6-NATIVE_VLAN_TAGGING: Please enable the native VLAN tagging feature for proper functioning of the Q-in-Q service.

Explanation QnQ may not function properly for packets in the native VLAN if native VLAN tagging is not enabled.

Recommended Action Enable native VLAN tagging by entering the vlan dot1q tag native command.

QOS Messages

This section contains Quality of Service (QoS) messages.

QOS-3

Error Message %QOS-3-HA_BULK_SYNC: %s Failure in completing bulk sync

Explanation The QoS configuration cannot be synchronized to the standby.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %QOS-3-HA_BULK_SYNC_BEFORE_TIMEOUT: %s Failure in completing bulk sync before timeout

Explanation The QoS configuration cannot be synchronized to the standby.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %QOS-3-HA_GET_ARG_NUM: %s Failure in getting event identification

Explanation The QoS configuration cannot be synchronized to the standby.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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 %QOS-3-HQFPOOLERR: interface [chars]: failed to allocate hqf particle

Explanation The HQF particle pool is empty. It cannot process a router generated packet.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show buffer and show policy interface commands to gather data that may help identify the cause 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/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 %QOS-3-NOCAPID: Failed to allocate QoS capability ID.

Explanation No more QoS capability IDs are available.

Recommended Action Change the Cisco IOS software image so that it can support more QoS capability IDs. Copy the message exactly as it appears on the 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.

QOS-6

Error Message %QOS-6-EXTENDED_BURST_CHANGED_WARN: Illegal extended burst size; it is
increased to [int]

Explanation Configured extended burst size is less than the Rate. It is considered to be illegal and has been reset based on the Rate.

Recommended Action This is an informational message only. No action is required.

Error Message %QOS-6-NORMAL_BURST_CHANGED_WARN: Illegal normal burst size; it is
increased to [int]

Explanation Configured normal burst size is less than the Rate. It is considered to be illegal and has been reset based on the Rate.

Recommended Action This is an informational message only. No action is required.

QOSMGR Messages

This section contains Quality of Service (QoS) manager messages.

QOSMGR-3

Error Message %QOSMGR-3-FEATURE_NOT_FOUND: Cannot find feature for [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. Enter the show running-config 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/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 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 running-config commands and your pertinent troubleshooting logs.

Error Message %QOSMGR-3-FILTERTYPE_INVALID: Internal Error Invalid Policy filtertype
[dec]

Explanation An internal software error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show running-config 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/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 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 running-config commands and your pertinent troubleshooting logs.

Error Message %QOSMGR-3-MERGE_RES_COUNT: Internal Error Invalid count

Explanation An internal software error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show running-config 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/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 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 running-config commands and your pertinent troubleshooting logs.

Error Message %QOSMGR-3-NO_POLICER_QOSLABEL: Creating port Class Label Failed

Explanation An internal software error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show running-config 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/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 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 running-config commands and your pertinent troubleshooting logs.

 $\textbf{Error Message} ~ \texttt{QOSMGR-3-NO_VMR_QOSLABEL:} ~ \texttt{qm_generate_vmrs} ~ \texttt{have} ~ \texttt{no} ~ \texttt{qos} ~ \texttt{label}$

Explanation An internal software error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show running-config 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/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 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 running-config commands and your pertinent troubleshooting logs.

Error Message %QOSMGR-3-NULL_POLICER: Internal Error Invalid Policer

Explanation An internal software error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show running-config 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/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 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 running-config commands and your pertinent troubleshooting logs.

Error Message %QOSMGR-3-POLICER_RES_COUNT: Internal Error Invalid Policer count

Explanation An internal software error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show running-config 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/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 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 running-config commands and your pertinent troubleshooting logs.

Error Message %QOSMGR-3-POLICYMAP_NOT_FOUND: Cannot find policymap for [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. Enter the show running-config 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/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 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 running-config commands and your pertinent troubleshooting logs.

Error Message %QOSMGR-3-QUEUE_PTR_ERROR: queue pointers out of order [hex] [hex]

Explanation An internal software error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show running-config 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/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 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 running-config commands and your pertinent troubleshooting logs.

Error Message %QOSMGR-3-RESERVE_COUNT_ERROR: Reserved Count Exceeding total [dec]

Explanation An internal software error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show running-config 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/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 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 running-config commands and your pertinent troubleshooting logs.

Error Message %QOSMGR-3-RESOURCE_INTERNAL: Internal Error in resource allocation

Explanation An internal software error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show running-config 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/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 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 running-config commands and your pertinent troubleshooting logs.

Error Message %QOSMGR-3-VMRSEQ_INVALID: Internal Error Invalid VMR sequence

Explanation An internal software error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show running-config 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/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 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 running-config commands and your pertinent troubleshooting logs.

QOSMGR-4

Error Message %QOSMGR-4-ACTION_NOT_SUPPORTED: Action is not supported in policymap
[chars]

Explanation An action that cannot be configured by the **set, trust,** and **police** commands in policy map configuration mode was configured in a policy map. This condition indicates a hardware limitation.

Recommended Action Configure only the supported actions that can be configured by the **set**, **trust**, and **police** commands in policy map configuration mode.

Error Message %QOSMGR-4-CLASS_NOT_SUPPORTED: Classification is not supported in classmap [chars]

Explanation An unsupported **match class-map** command was entered in class-map configuration mode in a policy map and attached to an egress interface, or more than one **match** command was configured. This condition indicates a hardware limitation.

Recommended Action Reconfigure the class map or the policy map. Use only the **match dscp** command in class-map configuration mode in a policy map that is attached to an egress interface. Only one match per class map is supported.

Error Message %QOSMGR-4-COMMAND_FAILURE: Execution of [chars] command failed on [chars]

Explanation The command to configure a QoS setting failed. This condition possibly indicates a lack of hardware resources.

Recommended Action Check to see if any other messages along with this message indicate a resource failure. If other messages indicate that the hardware resources have been exceeded, retry the command with a smaller configuration. If you require more 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/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 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 %QOSMGR-4-HARDWARE_NOT_SUPPORTED: Hardware limitation has reached for policymap [chars]

Explanation The hardware cannot support the current policy map configuration. More QoS ACL entries have been configured than the number that is specified in the Switch Database Management template.

Recommended Action Reconfigure the class map or the policy map and reduce the number of QoS ACLs.

Error Message %QOSMGR-4-MATCH_NOT_SUPPORTED: Match type is not supported in classmap
[chars]

Explanation An unsupported match type was specified. The only match types that are supported are match access-group, match dscp, and match precedence.

Recommended Action Reconfigure the class map. Ensure that only the **match access-group, match dscp**, and **match precedence** commands in class-map configuration mode are used within the class map.

Error Message %QOSMGR-4-NOT_SUPPORTED: Action '[chars]' is not supported for a policymap attached to output side.

Explanation A **set** or **trust** command was configured in policy-map class configuration mode in a policy map and attached to an egress interface. The requested action will not be applied to the configuration.

Recommended Action Do not configure a **set** or **trust** command in policy-map class configuration mode in a policy map and attach it to an egress interface. These policy map actions are supported only on ingress interfaces.

Error Message %QOSMGR-4-POLICER_PLATFORM_NOT_SUPPORTED: Policer configuration has exceeded hardware limitation for policymap [chars]

Explanation The policy map configuration has exceeded the limitation of the hardware. More policers have been configured in all policy maps by using the **police** or **police** aggregate command in policy-map class configuration mode than can be supported by the hardware.

Recommended Action Reconfigure the class map or the policy map or delete the policy from some interfaces.

Error Message %QOSMGR-4-POLICER_POLICY_NOT_SUPPORTED: Number of policers has exceeded per policy hardware limitation for policymap [chars]

Explanation The policy map configuration has exceeded the limitation of the hardware. More policers have been configured in a policy map by using the **police** or **police aggregate** command in policy-map class configuration mode than can be supported by the hardware.

Recommended Action Reconfigure the class map or the policy map, and reduce the number of policers.

QUICC-1

Error Message %QUICC-1-UNAVAILABLE: QUICC(%d/%d), Clear to Send Lost

Explanation The Clear To Send (CTS) input signal on a data terminal equipment (DTE) serial interface became inactive while transmitting a frame. This problem is a result of a communication line failure or cable disconnection.

Recommended Action Check the serial interface cable and/or communication equipment, such as the channel service unit/data service unit (CSU/DSU).

Error Message %QUICC-1-UNAVAILABLE: QUICC(%d/%d), SCC%x init failed

Explanation The software failed to initialize/restart a 1T serial card.

Recommended Action Clear the serial interface. If the message recurs, call your technical support representative for assistance.

Error Message %QUICC-1-UNAVAILABLE: QUICC(%d/%d), Transmit underflow

Explanation While transmitting a frame, the serial controller chip's local buffer received insufficient data because data could not be transferred to the chip fast enough to keep pace with its output rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

Recommended Action The system should recover. No action is required.

Error Message %QUICC-1-UNAVAILABLE: Quicc(%d), BRI card in wrong slot(1)

Explanation The BRI card is not supported in WIC slot 0.

Recommended Action Power down, move the BRI card to the other WIC slot on the port module and reboot.

Error Message %QUICC-1-UNAVAILABLE: Quicc(%d), Unexpected modem-signal interrupt

Explanation The software did not expect to see a modem control signal change on this type of WIC card interface.

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

Error Message %QUICC-1-UNAVAILABLE: Quicc(%d), wic card has an unknown id of %x

Explanation The software does not recognize the type of WIC card plugged into the port module.

Recommended Action Check the part number on the WIC card to verify that it is supported in the IOS release operational on the router or contact your technical support representative.

Error Message %QUICC-1-UNAVAILABLE: Quicc(%d/%d), Excessive modem control changes

Explanation The system received too many modem control signal interrupts. Modem control signals are hardware handshake signals between data terminal equipment (DTE) and data communications equipment (DCE). The signals include either a data carrier detect (DCD) or a data set ready (DSR), or both DCD and DSR.

Recommended Action Check the serial interface cable. The error can occur if the cable is disconnected or has come loose and is picking up noise. If the cable appears to be connected correctly, check the equipment connected to the cable.

Error Message %QUICC-1-UNAVAILABLE: Quicc(%d/%d), Unexpected HDX state %d, event %d

Explanation A bad event was detected in the state machine for half duplex transmission/reception.

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

 $\textbf{Error Message} ~ \text{\$QUICC-1-UNAVAILABLE: Quicc(\$d/\$d), packet too big, packet size was \$d bytes \\$

Explanation A packet greater than the assigned MTU of this serial interface was queued up for transmission.

Recommended Action The system should recover. No action is required. If the message recurs, it may indicate an error related to data traffic patterns. Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message QUICC-1-UNAVAILABLE: Quicc(%d/%d), packet was less than 2 bytes, packet size was %d 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. No action is required. If the message recurs, it may indicate a hardware error related to data traffic patterns. Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message %QUICC-1-UNAVAILABLE: Slot %d has an unsupported combination of ISDN WAN interface cards

Explanation It is not possible to support this type of BRI card in slot 1 along with another BRI card in slot 0.

Recommended Action Remove one of the BRI cards from either slot.

Error Message %QUICC-1-UNAVAILABLE: msgtxt_nomemory

Explanation The MC68360/QUICC CPU was unable to access the memory it needs to carry out its functions. Here are some possible causes. The network is large, requiring a lot of memory for routing tables, and so on. The router configuration has many features enabled, each of which require a certain amount of memory. A software error (memory leak) exists.

Recommended Action Reduce system activity to ease the memory demand, or upgrade to a larger memory configuration.

QUICC-3

Error Message %QUICC-3-UNAVAILABLE: QUICC(%d/%d), Buffer ownership error, pak=0x%x

Explanation An internal software error occurred.

Recommended Action Call your technical support representative to obtain a software upgrade.

Error Message %QUICC-3-UNAVAILABLE: Quicc, Incorrect SCC number

Explanation An internal software error occurred.

Recommended Action Call your technical support representative to obtain a software upgrade.

Error Message %QUICC-3-UNAVAILABLE: Unknown microcode revision number: %d

Explanation The MC68360/QUICC CPU was running an unexpected version of microcode. This could be possible if a new version of the QUICC chip was released or if a very old version was used in the manufacturing process. This could also occur if a new version of microcode was released to fix any bugs

Recommended Action A decrease in performance might occur for any async interfaces running PPP. Call your technical support representative if this is an issue.

Error Message %QUICC-3-UNAVAILABLE: msgtxt_ownerror

Explanation An internal software error occurred.

Recommended Action Call your technical support representative to obtain a software upgrade.

QUICC_ASYNC-3

Error Message %QUICC_ASYNC-3-UNAVAILABLE: Unit %d, Clear to Send Lost

Explanation The Clear To Send (CTS) input signal on a data terminal equipment (DTE) serial interface became inactive while transmitting a frame. This problem is a result of a communication line failure or cable disconnection

Recommended Action Check the serial interface cable and/or communication equipment, such as the channel service unit/data service unit (CSU/DSU).

QUICC_ETHER-1

Error Message %QUICC_ETHER-1-UNAVAILABLE: Unit %d, lost carrier. Transceiver
problem?

Explanation The Ethernet 10BaseT cable is unplugged.

Recommended Action Connect the 10BaseT Ethernet cable.

Error Message %QUICC_ETHER-1-UNAVAILABLE: msgtxt_initfail

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.

QUICC ETHER-3

Error Message %QUICC_ETHER-3-UNAVAILABLE: Unit %d, underflow error

Explanation While transmitting a frame, the Ethernet controller chip's local buffer received insufficient data because data could not be transferred to the chip fast enough to keep pace with its output rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

Recommended Action The system should recover. No action is required. If the problem reccurs, it indicates a hardware error that might be related to data traffic patterns. Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message %QUICC_ETHER-3-UNAVAILABLE: Unit %d, underflow error

Explanation While transmitting a frame, the Ethernet controller chip's local buffer received insufficient data because data could not be transferred to the chip fast enough to keep pace with its output rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

Recommended Action The system should recover. No action is required. If the problem recurs, it indicates a hardware error that might be related to data traffic patterns. Copy the error message exactly as it appears, and report it to your technical support representative.

QUICC_ETHER-5

Error Message %QUICC_ETHER-5-UNAVAILABLE: Unit %d, excessive collisions. Retry limit
%d exceeded

Explanation An Ethernet cable is broken or unterminated.

Recommended Action Check cables for proper connections, termination, and so on.

Error Message %QUICC_ETHER-5-UNAVAILABLE: Unit %d, heartbeat check failure

Explanation The Ethernet cable might be too long, or there could be too many repeaters such that the delay from one end to the other is too long. The Ethernet cable might be overloaded with too many users.

Recommended Action Verify that your Ethernet cable is the correct length and that you do not have too many repeaters in use. If these are not the problem, try removing hosts from the Ethernet segment to reduce the load.

Error Message %QUICC_ETHER-5-UNAVAILABLE: Unit %d, heartbeat check failure

Explanation The Ethernet transceiver is malfunctioning.

Recommended Action Replace the hardware.

Error Message %QUICC_ETHER-5-UNAVAILABLE: Unit %d, late collision error

Explanation The Ethernet cable might be too long, or there could be too many repeaters such that the delay from one end to the other is too long. The Ethernet cable might be overloaded with too many users.

Recommended Action Verify that your Ethernet cable is the correct length and that you do not have too many repeaters in use. If these are not the problem, try removing hosts from the Ethernet segment to reduce the load.

QUICC_SERIAL-1

Error Message %QUICC_SERIAL-1-UNAVAILABLE: msgtxt_initfail

Explanation The serial interface controller of the QUICC chip could not be initialized or started for operation. There is probably a hardware problem.

Recommended Action Power cycle the system. If the error reoccurs, replace the unit.

Error Message %QUICC_SERIAL-3-UNAVAILABLE: Unit %d, Clear to Send Lost

Explanation The Clear To Send (CTS) input signal on a data terminal equipment (DTE) serial interface became inactive while transmitting a frame. This problem stems from a communication line failure or cable disconnection.

Recommended Action Check the serial interface cable and or communication equipment such as the channel service unit/data service unit (CSU/DSU).

Error Message %QUICC_SERIAL-3-UNAVAILABLE: Unit %d, underflow error

Explanation While transmitting a frame, the serial controller chip's local buffer received insufficient data because data could not be transferred to the chip fast enough to keep pace with its output rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

Recommended Action The system should recover. No action is required. If the problem reccurs, it indicates a hardware error that might be related to data traffic patterns. Copy the error message exactly as it appears, and report it to your technical support representative.

QUICC SERIAL-5

Error Message %QUICC_SERIAL-5-UNAVAILABLE: Unit %d, carrier detect signal lost during message reception

Explanation The RS-232C Carrier Detect (DCD) signal was de-asserted during message reception. The DCE equipment is responsible for asserting this signal.

Recommended Action Check the serial interface cable. The error can occur if the cable is disconnected.

Error Message %QUICC_SERIAL-5-UNAVAILABLE: Unit %d, excessive modem control changes

Explanation The system received too many modem control signal interrupts. Modem control signals are hardware handshake signals between data terminal equipment (DTE) and data communications equipment (DCE). The signals include either a data carrier detect (DCD) or a data set ready (DSR), or both a DCD and a DSR.

Recommended Action Check the serial interface cable. The error can occur if the cable is disconnected or has come loose and is picking up noise. If the cable appears to be connected correctly, check the equipment connected to the cable.

R4K_MP Messages

This section contains central processing unit (R4K_MP) messages.

R4K_MP-3

Error Message %R4K MP-3-CRASHED: CPU [dec] has now crashed a total of [dec] times.

Explanation The specified CPU failed the specified number of times and has been restarted.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 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.

R4K MP-5

Error Message %R4K_MP-5-DELEGATE_GETBUF: Delegated call to [hex] failed, out of buffers

Explanation A remote procedure call (RPC) to the specified function 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 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.

RAC-3

Error Message %RAC-3-UNAVAILABLE: Can not find lease information for interface %s

Explanation Internal error - DHCP lease information is missing for the interface

Recommended Action Report the problem and how it can be reproduced to Cisco TAC

Error Message %RAC-3-UNAVAILABLE: Can't create RAC work queue

Explanation Internal error - probable cause is insufficient memory resources

Recommended Action Check available memory.

Error Message %RAC-3-UNAVAILABLE: DHCP is already running on interface %s

Explanation The interface already has a DHCP originated address via some other system mechanism

Recommended Action Verify the system configuration

RADIO-2

Error Message %RADIO-2-UNAVAILABLE: Radio%d/0, ODU %d: over temperature %s

Explanation Most likely cause is hardware failure or solar heating

Recommended Action Keep the RF ODU cool

RADIO-3

Error Message %RADIO-3-UNAVAILABLE: Radio%d/0, failed self-test

Explanation Most likely 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 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.

RADIO-4

Recommended Action logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message RADIO-4-UNAVAILABLE: %s%d/%d, Chip %s: failed to find image given current configuration

Explanation Most likely configured to use external files

Recommended Action Change configuration to use internal files

Explanation The DONE pin of a FPGA device on the RADIO line card did not assert after the downloading of the device. This probably indicates an existing or developing 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 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 RADIO-4-UNAVAILABLE: Radio%d/0, Error processing indication from DSP %s (%s:%d)

Explanation A DSP on the RADIO line card generated an indication message that could not be processed. This can happen when the router is operating under severe traffic 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/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 RADIO-4-UNAVAILABLE: Radio%d/0, HPI timeout while attempting to access DSP %s

Explanation A DSP on the RADIO line card was not granting access to its memory. Most likely cause is a DSP firmware 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/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 %RADIO-4-UNAVAILABLE: Radio%d/0, IDU IF internal serial communication
error - %s

Explanation Most likely cause is a loose IF baby board

Recommended Action Replace hardware

Explanation The INIT pin of a FPGA device on the RADIO line card asserted midway through the downloading of the device. Most likely cause is corrupted FPGA 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.

Explanation The INIT pin of a FPGA device on the RADIO line card did not assert when the PROG pin was asserted. This indicates either a faulty FPGA device or software problem resetting it.

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 %RADIO-4-UNAVAILABLE: Radio%d/0, Internal %s Oscillator out of Lock %s

Explanation Most likely cause is vibration or hardware failure

Recommended Action Replace internal card

Error Message %RADIO-4-UNAVAILABLE: Radio%d/0, ODU %d %s Oscillator out of Lock %s

Explanation Most likely cause is vibration or hardware failure

Recommended Action Replace electronics on Out Door Unit

Error Message %RADIO-4-UNAVAILABLE: Radio%d/0, ODU %d is %s

Explanation Most likely cause is a disconnected cable

Recommended Action Check or replace cable from UBR to the Out Door Unit

Error Message %RADIO-4-UNAVAILABLE: Radio%d/0, ODU %d max transmitter power exceeded
%s

Explanation Most likely cause is hardware failure

Recommended Action Replace RF ODU

 $\textbf{Error Message} \;\; \$ \texttt{RADIO-4-UNAVAILABLE:} \;\; \texttt{Radio\$d/0, ODU \$d serial communication error -\$ s }$

Explanation Most likely cause is a disconnected cable

Recommended Action Check or replace cable from UBR to the Out Door Unit

Error Message %RADIO-4-UNAVAILABLE: Radio%d/0, ODU %d: supply voltage out of range %s

Explanation Most likely cause is hardware failure

Recommended Action Replace RF ODU

Error Message RADIO-4-UNAVAILABLE: Radio%d/0, ODU %d: temperature is %d degrees C, threshold is %d degrees C

Explanation Most likely cause is hardware failure or solar heating

Recommended Action Keep the RF ODU cool

Error Message RADIO-4-UNAVAILABLE: Radio%d/0, Unsupported IF PIC major eeprom version (%u) on IDU

Explanation IOS should be upgraded to support the new eeprom

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 RADIO-4-UNAVAILABLE: Radio%d/0, Unsupported RF PIC major eeprom version (%u) on ODU %d

Explanation Copy the message exactly as it appears on the 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.

Recommended Action Call tech support - upgrade IOS

Error Message %RADIO-4-UNAVAILABLE: Radio%d/0, bad IF PIC version (%d) on IDU

Explanation Most likely a hardware configuration oversite

Recommended Action Call tech support

Error Message %RADIO-4-UNAVAILABLE: Radio%d/0, bad RF PIC version (%d) on ODU %d

Explanation Most likely a hardware configuration oversite

Recommended Action Call tech support

Explanation Most likely cause is an improperly-programmed IDPROM

Recommended Action Have the IDPROM on the linecard reprogrammed

Error Message %RADIO-4-UNAVAILABLE: Radio%d/0, link synchronization %s.

Explanation Most likely cause loose ODU cable

Recommended Action Check all cables

Error Message %RADIO-4-UNAVAILABLE: Radio%d/0, link synchronization acquired.

Explanation Most likely cause is No Shut command

Recommended Action None

Error Message %RADIO-4-UNAVAILABLE: Radio%d/0, link synchronization re-acquired.

Explanation Most likely cause is No Shut command on remote end

Recommended Action None

Error Message %RADIO-4-UNAVAILABLE: Radio%d/0, radio phy eeprom %s checksum
(stored:0x%02x, calculated:0x%02x)

Explanation Most likely cause is Shut or No Shut command

Recommended Action Enter the No Shut command

Explanation A DSP on the RADIO line card generated a response message unexpectedly. This can happen when the router is operating under severe traffic 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/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 RADIO-4-UNAVAILABLE: Radio%d/0, uplink message queue overflow reported by DSP %s

Explanation At least one DSP-to-router message was lost due to that DSP's uplink queue being full. This can happen when many thresholds/histograms/timelines are being triggered or expiring at the same time.

Recommended Action Change thresholds and/or reduce histogram/timeline usage to lower the load on the system

RADIO-5

Error Message RADIO-5-UNAVAILABLE: <math>ssd/d, detected a bad CRC while downloading image ss to chip ss

Explanation Most likely a protocol error while downloading

Recommended Action If it's a TFTP download, try again; otherwise call tech support

Error Message %RADIO-5-UNAVAILABLE: %s%d/%d, timeout trying to open image %s for chip
%s

Explanation Most likely a protocol error while opening

Recommended Action If it's a TFTP download, try again; otherwise call tech support

Error Message %RADIO-5-UNAVAILABLE: Radio%d/0, %s %s threshold crossed ODU %d

Explanation Most likely cause is a user defined threshold

Recommended Action none

Error Message %RADIO-5-UNAVAILABLE: Radio%d/0, %s per %s threshold met(%d=%d)

Explanation Most likely cause is a mis-aligned antenna

Recommended Action Re-align the antenna(s)

Error Message %RADIO-5-UNAVAILABLE: Radio%d/0, Link synchronization acquired.

Explanation Phy layer successfully acquired link.

Recommended Action None

Error Message %RADIO-5-UNAVAILABLE: Radio%d/0, Lost link. Check remote transmitter.

Explanation Most likely cause remote system is not transmitting.

Recommended Action No Shut remote system

Error Message RADIO-5-UNAVAILABLE: Radio%d/0, ODU saftey interlock is preventing transmission. Check ODU and cables. %s

Explanation Most likely cause cable not attached, ODU overheated

Recommended Action Check ODU cable

Error Message %RADIO-5-UNAVAILABLE: Radio%d/0, Remote end reports: %s

Explanation Most likely cause cable not attached, ODU overheated

Recommended Action Check ODU cables

Error Message RADIO-5-UNAVAILABLE: Radio%d/0, Remote end reports: Unable to acquire link synchronization.

Explanation Most likely cause cable not attached, ODU overheated

Recommended Action Check ODU cables

Error Message RADIO-5-UNAVAILABLE: Radio%d/0, Still trying to establish link (frequency sync).

Explanation Most likely cause remote system is not transmitting on correct frequency

Recommended Action No Shut remote system

Error Message %RADIO-5-UNAVAILABLE: Radio%d/0, Still trying to establish link (timing sync).

Explanation Most likely cause remote system is not transmitting.

Recommended Action No Shut remote system

Error Message %RADIO-5-UNAVAILABLE: Radio%d/0, Still trying to establish link
(validate codeword).

Explanation Most likely cause remote system is not transmitting on correct frequency

Recommended Action No Shut remote system

Error Message %RADIO-5-UNAVAILABLE: Radio%d/0, Still trying to establish link
(viterbi sync).

Explanation Most likely cause remote system is not transmitting on correct frequency

Recommended Action No Shut remote system

Error Message %RADIO-5-UNAVAILABLE: Radio%d/0, event %23s in state %15s

Explanation Most likely cause incorrect configuration

Recommended Action Review configuration and hardware capabilities

Error Message %RADIO-5-UNAVAILABLE: Radio%d/0, hardware does not support requested
configuration: %s

Explanation Most likely cause is incorrect configuration

Recommended Action Change the configuration to match the hardware

 $\textbf{Error Message} \ \$ \texttt{RADIO-5-UNAVAILABLE:} \ \texttt{Radio\$d/0, invalid or inconsistent configuration} \ \texttt{requested \$s}$

Explanation Most likely cause is the ARQ settings are not supported by the current radio channel parameters

Recommended Action Change ARQ settings to allowed values given the current radio channel parameters. You can use the radio arq reset command to do this.

Error Message %RADIO-5-UNAVAILABLE: Radio%d/0, link metrics cleared

Explanation User requested the link metrics be cleared

Recommended Action none

RADIO-6

Error Message %RADIO-6-UNAVAILABLE: %s%d/%d, could not find image %s for chip %s

Explanation Most likely a typo when set the url of the image

Recommended Action Try again

Error Message %RADIO-6-UNAVAILABLE: Radio%d/0, self-test successful

Explanation Passed a self-diagnostic

Recommended Action This is a good thing

RADIO_DRIVER-1

Error Message %RADIO_DRIVER-1-UNAVAILABLE: Only found %d interfaces on bay %d, shutting down bay

Explanation Most likely system or hardware failure

Recommended Action Replace Line Card

RADIO_DRIVER-3

Error Message $RADIO_DRIVER-3-UNAVAILABLE: A line card local bus error, error status <math>0x*08x$, error address 0x*08x

Explanation A device on the RADIO line card local bus either didn't respond to a select, timed out once selected or issued an error while selected. This probably indicates an existing or developing hardware failure.

Error Message %RADIO_DRIVER-3-UNAVAILABLE: DMAC detected a descriptor sequence error (DMAC Status Register is 0x%08x).

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 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 %RADIO_DRIVER-3-UNAVAILABLE: DMAC reported PCI parity error (DMAC Status Reg: 0x%08x)

Explanation A parity error occurred on the PCI bus while the RADIO DMA controller was performing a read/write. This probably indicates an existing or developing 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 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 %RADIO_DRIVER-3-UNAVAILABLE: Device received a PCI Target Abort (DMAC Status Register is 0x%08x)

Explanation When attempting a PCI master read/write, the target issued an abort to the DMA controller. This usually indicates that an incorrect target was selected, and in this case means that shared packet memory was not the target. This is likely a software error causing the RADIO DMAC to access an invalid target.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With 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 %RADIO_DRIVER-3-UNAVAILABLE: Device reported %#x

Explanation Most likely hardware failure

Recommended Action Replace defective hardware