FM Messages

This section contains Feature Manager (FM) messages.

FM-2

Error Message %FM-2-ACL_MERGE_EXCEPTION: ACL merge internal error due to features configured on interface [chars] in [chars] direction, traffic may be switched in software

Explanation The configured features for this interface caused the merge to abort because of an internal error. The traffic on this interface and the interfaces sharing TCAM label with this interface will be sent to the software.

Recommended Action Redefine and reapply or unconfigure one or more features on the interface.

Error Message %FM-2-ACL_MERGE_NUM_ACES: ACL merge aborted due to number of ACEs threshold for features on interface [chars] in [chars] direction, traffic may be switched in software

Explanation The configured features for this interface may have caused the merge to abort because of hitting the 64000 ACE merge threshold. The traffic on this interface and the interfaces sharing the TCAM label with this interface will be sent to the software.

Recommended Action Redefine and reapply or unconfigure one or more features on the interface.

Error Message %FM-2-FIE_EXCEPTION: Feature interaction internal error due to features configured on interface [chars] in [chars] direction, traffic may be switched in software

Explanation The configured features for this interface caused an internal error in the feature interaction. The traffic on this interface and the interfaces sharing the TCAM label with this interface will be sent to the software.

Recommended Action Redefine and reapply or unconfigure one or more features on the interface.

 $\label{lem:conflicting} \textbf{Error Message} ~ \text{FM-2-FLOWMASK_CONFLICT: Features configured on interface [chars]} \\ \text{have conflicting flowmask requirements, traffic may be switched in software} \\$

Explanation The configured features for this interface have a flow mask conflict. The traffic on this interface and the interfaces sharing the TCAM label with this interface may not comply with the features under this condition. The traffic on these interfaces will be sent to the software.

Recommended Action Redefine and reapply or unconfigure one or more features to avoid the conflict.

Error Message %FM-2-TCAM_ERROR: TCAM programming error %d

Explanation A software error caused a failure in programming ACLs into the TCAM.

Recommended Action Choose the Order Dependent Merge (ODM) algorithm for merging the ACL. Shut down the VLAN interface and reenable the interface after ten minutes. If the error 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 %FM-2-TCAM_MEMORY: ACL merge abandoned when merging Interface [chars] [chars] ACLs due to insufficient memory. Interface traffic handled in Software.

Explanation The capacity of the hardware TCAM has been exceeded and the packets will be now process-switched. The first [chars] value indicates the VLAN interface for which the ACL merge fails, and the second [chars] indicates whether the ACL is ingress or egress.

Recommended Action Choose the Order Dependent Merge (ODM) algorithm for merging the ACL. Shut down the VLAN interface and reenable the interface after ten minutes. If the error 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 %FM-2-TCP_FLAG_HW_EXCEPTION: No VLOUs available for TCP FLAGs for interface [chars] in [chars] direction: all features on the interface for the specified direction will be NOT effective

Explanation No VLOUs are available for TCP flags. This condition cannot be handled in the software for all the features configured on the interface. A message is printed on the console to notify the user of this error condition. Because there are no features that the software can handle, the system will program an entry to permit all traffic.

Recommended Action The hardware TCAM can handle up to 9 logical operations per interface and up to 64 logical operations in total. To recover from this error, recompute the ACLs for the features that cannot be handled in the software (for example, VACLs) to move entries using TCP flags before others entries are moved and to minimize the usage of TCP flags.

Error Message %FM-2-TCP_FLAG_SW_EXCEPTION: No VLOUs available for TCP FLAGs on
interface [chars] in [chars] direction: traffic will be software switched,
features which are NOT processable in software will be NOT effective

Explanation No VLOUs are available for TCP flags. This condition cannot be handled in the software for some features configured on the interface. A message is printed on the console to notify the user of this error condition. Because there are some features that can be handled in the software (for example, VACLs and RACLs), an exception entry and traffic on this interface will be sent to the software.

Recommended Action The hardware TCAM can handle up to 9 logical operations per interface and up to 64 logical operations in total. To recover from this error, recompute the ACLs for the features that cannot be handled in the software (for example, VACLs) to move entries using TCP flags before others entries are moved and to minimize the usage of TCP flags.

FM-3

Error Message %FM-3-LABELERROR: Incorrect label to [chars] vlan label attribute copy
callback srclabel [dec], dstlabel [dec]

Explanation The Feature Manager attribute copy callback was called with an incorrect source or destination label.

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

Error Message %FM-3-NOTEMPTY: Illegal copy of attribute to non empty [chars] vlan label [dec]

Explanation The Feature Manager attribute copy callback was called with a destination label already being used by a VLAN or routed port.

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

Error Message %FM-3-UNKNOWNACTION: Unknown VMR access group action [hex]

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

FM-4

Error Message %FM-4-EXCESSSECONDARY: More than [dec] secondary IP addresses
configured on interface [chars]

Explanation When secondary IP addresses are configured on an interface, the hardware is usually programmed so that the ICMP redirect functionality on the CPU is not notified of packets sent between two subnets configured on the same interface. If many secondary IP addresses are configured on the same interface it becomes impractical to program the hardware in this manner. This message is logged, and the CPU will be notified of every packet sent between two subnets on this interface. No ICMP redirects will be sent in error, but the CPU usage may increase because of the additional notifications.

Recommended Action Enter the **no ip redirects** command on the interface to reduce the CPU load on the system.

Error Message %FM-4-MPLS_RSVD_VLAN_ERROR: Failed attempt to remove the default feature from MPLS reserved vlan [chars]

Explanation MPLS reserved vlan's have a default 'permit ip any any' ACL configured. In some corner cases an event is generated to unconfigure this default feature. Such instances should be blocked.

Recommended Action No functional impact. Contact TAC with the traceback and also with the configuration steps that lead to the error message.

Error Message %FM-4-FLOWMASK_REDUCED: Features configured on interface [chars] have
conflicting flowmask requirements, some features may work in software

Explanation The configured features for this interface have a flow mask conflict. The traffic on this interface and the interfaces sharing the TCAM label with this interface will be sent to the software.

Recommended Action Redefine and reapply or unconfigure one or more features to avoid the conflict.

Error Message %FM-4-IPSG VACL: VACL Capture & IPSG conflict on i/f [chars]

Explanation Because VACL capture and IPSG is not supported on the same VLAN port, VACL capture will be inactive. To activate VACL capture, reconfigure the feature after removing IPSG.

Recommended Action Remove either IPSG or VACL capture on this interface.

Error Message %FM-4-L2_DYN_TCAM_EXCEPTION: Failed to install Dynamic TCAM entry to
filter Layer 2 traffic, error status: [dec], host IP address: [IP_address],
interface: [chars]

Explanation There is an error in installing the per-user policies in the Dynamic TCAM region to filter Layer 2 traffic. The TCAM might be full. As a result, host ingress traffic will be subjected to the default interface ACL.

Recommended Action Attempt to free up TCAM resources.

Error Message %FM-4-L2EOU_INSP: INSPECION & L2EOU conflict on i/f [chars]

Explanation The inspection feature and the Layer 2 EAP over UDP (L2EOU) feature are not supported on the same VLAN. The inspection feature will be inactive. To activate the inspection feature, reconfigure it after removing the L2EOU feature.

Recommended Action Remove either the Layer 2 EAP over UDP (L2EOU) feature or the inspection feature from the interface.

Error Message %FM-4-L2EOU_VACL: VACL Capture & L2EOU conflict on i/f [chars]

Explanation Because VACL capture and the Layer 2 EAP over UDP (EOU) feature are not supported on the same VLAN port, VACL capture will be inactive. To activate VACL capture, reconfigure the feature after removing the L2EOU feature.

Recommended Action Remove either the Layer 2 EAP over UDP (EOU) feature or VACL capture on this interface.

Error Message %FM-4-TCAM_ADJ: Hardware ACL adjacency capacity exceeded

Explanation The hardware does not have the capacity to handle all of the configured adjacencies.

Recommended Action The configured policies have too many adjacencies to fit in the hardware. Use the **mls tcam priority** command to prioritize interfaces for hardware switching. Reduce the number of adjacencies in the policies.

Error Message %FM-4-TCAM_DYN_ENTRY_EXCEPTION: Failed to install Dynamic TCAM entry
in TCAM for Interface:[chars]

Explanation Dynamic installation of an ACE failed because of TCAM resource exhaustion. Layer 3 traffic will be handled by the software.

Recommended Action Attempt to free up TCAM resources.

Error Message %FM-4-TCAM MASK: Hardware TCAM MASK entry capacity exceeded

Explanation The hardware TCAM has exhausted its available storage and does not have the capacity to store all configured ACLs.

Recommended Action If the ACL merge algorithm is currently binary decision diagrams (BDD), space could be freed by changing the merge algorithm to order dependent merge (ODM). Enter the **show fm summary** command to determine the current merge algorithm. Enter the **mls aclmerge algorithm odm** command to change the merge algorithm from BDD to ODM. Enter the **mls tcam priority** command to prioritize interfaces for hardware switching. Attempt to share the same ACLs across multiple interfaces in order to reduce TCAM resource contention. If server load balancing is configured, enter the **mls ip slb search wildcard rp** command to reduce the amount of TCAM space used by server load balancing. After you enter the command, server load balancing will increase its utilization of the route processor.

FMCORE Messages

This section contains Core Feature Manager (FMCORE) messages.

FMCORE-2

Error Message %FMCORE-2-ACL_FAILURE: Interface [chars] traffic will not comply with
ACLs in [chars] direction(s)

Explanation ACLs will not be applied on traffic for the specified interface because of a TCAM resource contention.

Recommended Action The configured ACLs are too large for all of them to fit in the hardware TCAM. Use the **mls tcam priority** command to prioritize interfaces for hardware switching. Try to share the same ACLs across multiple interfaces to reduce TCAM resource contention.

Error Message %FMCORE-4-RACL_REDUCED: Interface [chars] routed traffic will be software switched in [chars] direction

Explanation TCAM resource contention prevents ACLs from being applied in the TCAM for this interface. The traffic on this interface will be sent to software so that the ACLs can be applied.

Recommended Action The configured ACLs are too large to all fit in the hardware TCAM. Enter the **mls tcam priority** command to prioritize the interfaces for hardware switching. Try to share the same ACLs across multiple interfaces to reduce TCAM resource contention.

Error Message %FMCORE-2-VACL_FAILURE: Interface [chars] traffic will not comply
with VACLs in [chars] direction(s)

Explanation VACLs will not be applied on traffic for this interface because of a TCAM resource contention.

Recommended Action The configured ACLs are too large for all of them to fit in the hardware TCAM. Use the **mls tcam priority** command to prioritize interfaces for hardware switching. Try to share the same ACLs across multiple interfaces to reduce TCAM resource contention.

FMCORE-4

Explanation A TCAM resource contention prevents ACLs from being applied in the TCAM for the specified interface. The traffic on the interface will be sent to software so that the ACLs can be applied.

Recommended Action The configured ACLs are too large for all of them to fit in the hardware TCAM. Use the **mls tcam priority** command to prioritize interfaces for hardware switching. Try to share the same ACLs across multiple interfaces to reduce TCAM resource contention.

FMCORE-6

Error Message %FMCORE-6-RACL_ENABLED: Interface [chars] routed traffic is hardware switched in [chars] direction

Explanation Earlier TCAM resource contention may have prevented ACLs from being applied in the TCAM for this interface. It has been enabled and traffic on this interface is hardware switched.

Recommended Action No need to take an action for this as it is an informational message not an error message.

FM EARL6 Messages

This section contains Enhanced Address Recognition Logic 6 Feature Manager (FM_EARL6) messages.

FM_EARL6-4

Error Message %FM_EARL6-4-RACL_REDUCED_MCAST_RATELIM_WARN: Enabling acl [chars] rate-limiter will cause Multicast traffic to be dropped in hardware on interface [chars] in [chars] direction

Explanation A TCAM resource contention prevents routed ACLs from being programmed in the TCAM for the specified interface in the specified direction. All Layer 3 traffic will be sent to CPU to have RACLs enforced in software. Due to a lack of resources, multicast special VMRs cannot be programmed. In this condition, rate limiting for traffic bridged to the CPU by the ACL is incompatible with the status of the multicast interface and will cause multicast traffic to be dropped in the hardware.

Recommended Action Do not enter the mls unicast acl {input | output} command.

Error Message %FM_EARL6-4-VACL_PVLAN: Vacl config is NOT supported on secondary Vlan: [chars] and will be removed

Explanation Current implementation of the FM does not support the configuration of VACLs on secondary VLANs. The VACL configuration is removed from the VLAN interface once it becomes a secondary private VLAN. Both the hardware and the software will be updated accordingly.

Recommended Action Make the VLAN a primary VLAN or a regular (nonprivate) VLAN. Reapply the VLAN filter.

FM_EARL7 Messages

This section contains Enhanced Address Recognition Logic 7 Feature Manager (FM_EARL7) messages.

FM_EARL7-2

Error Message %FM_EARL7-2-IPV6_PORT_QOS_MCAST_FLOWMASK_CONFLICT: QoS configuration
on port [chars] conflicts for flowmask with IPv6 multicast forwarding on SVI
interface [chars]

Explanation The port-based QoS microflow policing configuration for this interface has a flow mask conflict with IPv6 multicast forwarding. The traffic on the SVI interface will be sent to the software under this condition.

Recommended Action Unconfigure the latest configuration change, modify the conflicting QoS configuration, and reapply.

Error Message %FM_EARL7-2-IPV6_QOS_MCAST_FLOWMASK_CONFLICT: QoS configuration on interface [chars] conflicts for flowmask with IPv6 multicast forwarding, traffic may be switched in software

Explanation The QoS microflow policing configuration for this interface has a flow mask conflict with IPv6 multicast forwarding. The traffic on this interface will be sent to the software under this condition.

Recommended Action Unconfigure the latest configuration change, modify the conflicting QoS configuration, and reapply.

Error Message %FM_EARL7-2-SWITCH_PORT_QOS_FLOWMASK_CONFLICT: QoS configuration on switch port [chars] conflicts for flowmask with feature configuration on SVI interface [chars]

Explanation The QoS configuration on the specified port has a conflict with a feature configuration on an SVI interface. QoS or other features might not function correctly under these circumstances.

Recommended Action Unconfigure the latest configuration change, modify the conflicting configuration, and reapply the features.

FM EARL7-4

Error Message %FM_EARL7-4-FEAT_CONFLICT_ON_IDB: IP ADMISSSION feature conflicts
with other features on interface [chars], feature will work in software

Explanation The IP admission feature conflicts with other features on this interface.

Recommended Action Unconfigure any conflicting features and reapply the IP admission feature.

Explanation The flow mask requested by the specified feature conflicts with other features. The requested flow mask cannot be programmed for the feature.

Recommended Action Redefine and reapply the feature, or unconfigure one or more features and reapply the specified feature to avoid the conflict.

 $\label{lower_state} \textbf{Error Message } \$\texttt{FM_EARL7-4-FEAT_FLOWMASK_REQ_CONFLICT_ON_SP: Flowmask requested on interface [chars] conflicts with other features on interface for Protocol [chars], flowmask request Unsuccessful for the feature \\$

Explanation The flow mask requested by the feature conflicts with other features. The requested flow mask cannot be programmed for the feature.

Recommended Action Redefine and reapply the feature, or reconfigure one or more features and reapply the feature to avoid the conflict.

 $\label{lem:entropy} \textbf{Error Message } $FM_EARL7-4-FLOW_FEAT_FLOWMASK_REQ_FAIL: Flowmask request for the flow based feature [chars] for protocol [chars] is unsuccessful, hardware acceleration may be disabled for the feature $$ $ (ABC) = (ABC) =$

Explanation The flow mask request for the flow-based feature is unsuccessful. This condition might occur because of a TCAM resource exception, a flow mask registers resource exception, or an unresolvable flow mask conflict with other NetFlow-based features. The NetFlow shortcut installation and hardware acceleration for the feature might be disabled under this condition, and the feature might be applied in the software.

Recommended Action Determine the netflow shortcut installation enable/disable status for the feature by entering the **show fm fie flowmask** command. If the NetFlow shortcut installation and hardware acceleration is disabled for the feature, reconfigure or unconfigure some of the other features to remove the TCAM resource exception or the flow mask conflict/flow mask resource exception condition. Reapply the feature for the flow mask request to succeed, and reenable the NetFlow shortcut installation for the feature.

Error Message %FM_EARL7-4-FEAT_QOS_FLOWMASK_CONFLICT:Features configured on interface [chars] conflict for flowmask with QoS configuration on switch port [chars], traffic may be switched in software

Explanation The configured features for the specified interface have flow mask conflicts with the QoS configuration on the switch port. The traffic on this interface will be sent to software.

Recommended Action Undo the latest configuration change, modify the conflicting QoS configuration on the switch port, and reapply the features.

Error Message %FM_EARL7-4-FLOW_FEAT_FLOWMASK_REQ_FAIL: Flowmask request for the flow based feature [chars] for protocol [chars] is unsuccessful, hardware acceleration may be disabled for the feature

Explanation The flow mask request for the flow-based feature is unsuccessful. This may happen due to TCAM resource exception or flow mask registers resource exception or due to unresolvable flow mask conflict with other NetFlow-based features. NetFlow shortcut installation and hardware acceleration for the feature may be disabled under this condition and the feature may be applied in software.

Recommended Action Check the NetFlow shortcut installation enable/disable status for the feature by entering the **show fm fie flowmask** command. If NetFlow shortcut installation/hardware acceleration is disabled for the feature, reconfigure or unconfigure some of the other features to remove the TCAM resource exception or the flow mask conflict/flow mask resource exception condition. Reapply the feature for the flow mask request to succeed and reenable the NetFlow shortcut installation for the feature.

 $\label{lem:conflict:mls} \textbf{Error Message} ~ \text{\footnote{thm}} & \text{\footnote{thm}} &$

Explanation The configured MLS flow mask conflicts with other features or with the QoS configuration. The traffic on the specified interface will be sent to the software. NDE might not function correctly for the specified interface under this condition.

Recommended Action Remove the conflicting configuration, and reconfigure the MLS flow mask.

Error Message %FM_EARL7-4-MLS_FLOWMASK_NO_TCAM_RESOURCES: mls flowmask may not be honored on interface [chars] due to TCAM resource shortage

Explanation The requirements for the configured features exceed the TCAM resources. The flow mask may not be programmed in the hardware. Under this condition, the traffic on the specified interface is sent to the software. NDE may not function correctly for this interface.

Recommended Action Redefine and reapply some of the features, or unconfigure one or more features.

Error Message %FM_EARL7-4-MLS_IPV6_FORCED_COMPRESS_MODE: Use IPv6 mask values of 88 or lower in forced compress mode for consistent processing of incompressible IPv6 addresses in both hardware and software.

Explanation IPv6 compress mode is a hardware feature. If compress mode is force-enabled and IPv6 ACLs are built with mask values 89 or greater, inconsistent behavior in IPv6 ACL processing could result with incompressible addresses. Using IPv6 mask values of 88 and lower while forcing compress mode ensures proper hardware processing of IPv6 ACL entries.

Recommended Action Use IPv6 mask values of 88 or lower in forced compress mode for consistent processing of incompressible IPv6 addresses in both hardware and software.

Error Message %FM_EARL7-4-NO_FLOWMASK_REGISTERS: Feature configuration on interface
[chars] could not allocate required flowmask registers, traffic may be switched
in software

Explanation The flow mask requirements for configured features on the specified interface cannot be met because there are no available flow mask registers. The traffic on this interface will be sent to software.

Recommended Action Remove one or more NetFlow-based features or QoS microflow policing from the configuration, and reapply the features.

Error Message %FM_EARL7-4-RACL_REDUCED_MCAST_RATELIM_WARN: Enabling acl [chars]
rate-limiter will cause Multicast traffic to be dropped in hardware on interface
[chars] in [chars] direction

Explanation A TCAM resource contention prevents routed ACLs from being programmed in TCAM for the specified interface in the specified direction. All Layer 3 traffic will be sent to CPU to have RACLs enforced in software. Due to a lack of resources, multicast special VMRs cannot be programmed. In this condition, rate limiting for traffic bridged to CPU by the ACL is incompatible with the status of the multicast interface and will cause multicast traffic to be dropped in hardware.

Recommended Action Do not enter the mls unicast acl {input | output} command.

Error Message %FM_EARL7-4-VACL_PVLAN: Vacl config is NOT supported on secondary Vlan: [chars] and will be removed

Explanation The current implementation of the Feature Manager does not support the configuration of VACLs on secondary VLANs. The VACL configuration is removed from the VLAN interface once it becomes a secondary private VLAN. Both the hardware and the software will then be updated accordingly.

Recommended Action Change the VLAN to be a primary VLAN or a regular (nonprivate) VLAN and reapply the VLAN filter.

FPD_MGMT Messages

This section contains FPD Management Subsystem (FPD_MGMT) messages.

FPD MGMT-2

Error Message %FPD_MGMT-2-CREATE_FAIL: Couldn't create [chars].

Explanation The system does not have enough free main memory to create the specified resource.

Recommended Action Make sure that the system main memory size meets the minimum requirement that is specified in the Cisco IOS software release note. If the system meets the minimum requirement for this Cisco IOS software release, make sure that the amount of free main memory in the system also meets the minimum memory required to use this software feature. Enter the show memory command to find out this information and add more main memory if it is necessary. If the system meets all the memory requirements, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

FPD MGMT-3

Error Message %FPD_MGMT-3-BNDL_CARD_TYPE_MISMATCH: The [chars] file does not contain the card type ([hex]) in the image bundle to indicate the support of the target card. Please make sure that this is a valid FPD image [chars] file for card in [chars].

Explanation The image bundle in the specified file does not contain a correct card type value for the target card.

Recommended Action Ensure that the version of the FPD image package, which is stated in the package filename, matches or is compatible with the Cisco IOS software release that the system is running. If the version is not the correct one, try to obtain the correct one from the Cisco Software Center website. If the problem persists, copy the message exactly as it appears on the console or in the system log. Enter the show hw-module subslot fpd, the show upgrade fpd table, and the show upgrade fpd file fpd-pkg-url 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 %FPD_MGMT-3-BNDL_CRC_CHECK_FAIL: The [chars] file contains a
corrupted image bundle - CRC mismatch: current value [hex], expected value [hex].
Please make sure that this is a valid FPD image [chars] file for card in [chars].

Explanation The file failed the CRC checking process. This failure indicates a corrupt FPD image bundle or package file.

Recommended Action Try to download again the required package from the Cisco Software Center website as the specified one might be corrupted. If the problem persists, copy the message exactly as it appears on the console or in the system log. Enter the Enter the show hw-module subslot fpd, the show upgrade fpd table, and the show upgrade fpd file fpd-pkg-url 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 %FPD_MGMT-3-BNDL_NAME_PREFIX_MISMATCH: The [chars] file contains a
bundle name prefix ([chars]) that does not match with the expected value of
"[chars]" for the image bundle. Please make sure that this is a valid FPD image
[chars] file for card in [chars].

Explanation The content of the selected FPD image bundle does not match its filename.

Recommended Action Ensure that the version of the FPD image package, which is stated in the package filename, matches or is compatible with the Cisco IOS software release that the system is running. If the version is not the correct one, try to obtain the correct one from the Cisco Software Center website. If the problem persists, copy the message exactly as it appears on the console or in the system log. Enter the show hw-module subslot fpd, the show upgrade fpd table, and the show upgrade fpd file fpd-pkg-url 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 %FPD_MGMT-3-BNDL_WRONG_HDR_LEN: The [chars] file contains wrong
header length for the image bundle: [int] bytes (expected [int] bytes). Please
make sure that this is a valid FPD image [chars] file for card in [chars].

Explanation The specified file might not be a valid FPD image bundle or package file for the target card.

Recommended Action Ensure that the version of the FPD image package, which is stated in the package filename, matches or is compatible with the Cisco IOS software release that the system is running. If the version is not the correct one, try to obtain the correct one from the Cisco Software Center website. If the problem persists, copy the message exactly as it appears on the console or in the system log. Enter the show hw-module subslot fpd, the show upgrade fpd table, and the show upgrade fpd file fpd-pkg-url 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 %FPD_MGMT-3-BNDL_WRONG_MAGIC_NUM: The [chars] file contains a wrong magic number for the image bundle: [hex] (expected [hex]). Please make sure that this is a valid FPD image [chars] file for card in [chars].

Explanation The specified file might not be a valid FPD image bundle or package file for the target card or the file could be corrupted.

Recommended Action Ensure that the version of the FPD image package, which is stated in the package filename, matches or is compatible with the Cisco IOS software release that the system is running. If the version is not the correct one, try to obtain the correct one from the Cisco Software Center website. If the problem persists, copy the message exactly as it appears on the console or in the system log. Enter the **show hw-module subslot fpd**, the **show upgrade fpd table**, and the **show upgrade fpd file** *fpd-pkg-url* 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 %FPD_MGMT-3-BNDL_WRONG_SIZE: The [chars] file contains incorrect image bundle size: [int] bytes (expected [int] bytes). Please make sure that this is a valid FPD image [chars] file for card in [chars].

Explanation The specified file might not be a valid FPD image bundle or package file for the target card.

Recommended Action Ensure that the version of the FPD image package, which is stated in the package filename, matches or is compatible with the Cisco IOS software release that the system is running. If the version is not the correct one, try to obtain the correct one from the Cisco Software Center website. If the problem persists, copy the message exactly as it appears on the console or in the system log. Enter the show hw-module subslot fpd, the show upgrade fpd table, and the show upgrade fpd file fpd-pkg-url 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 %FPD_MGMT-3-BUNDLE_EXTRACT_ERROR: Cannot extract the [chars] bundle from [chars] - [chars]

Explanation There has been a bundle file-extraction error. The cause of the failure is specified in the message. The specified file might not be a valid FPD image package file.

Recommended Action Ensure that the version of the FPD image package, which is stated in the package filename, matches or is compatible with the Cisco IOS software release that the system is running. If the version is not the correct one, try to obtain the correct one from the Cisco Software Center website. If the problem persists, copy the message exactly as it appears on the console or in the system log. Enter the show hw-module subslot fpd, the show upgrade fpd table, and the show upgrade fpd file fpd-pkg-url 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 %FPD_MGMT-3-CLOSE_FAILED: Failed to close [chars] file.

Explanation There is a problem in the internal software coding. This message should not be seen under normal operation.

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

Error Message %FPD_MGMT-3-DUPLICATE_UPGRADE_RESULT: Upgrade result already received
for the FPD image upgrade of FPD ID [int] for [chars] card in [chars].

Explanation There is a problem in the internal software coding. This message should not be seen under normal 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message %FPD_MGMT-3-FPD_UPGRADE_FAILED: [chars] (FPD ID=[int]) image upgrade
for [chars] card in [chars] has FAILED.

Explanation The FPD image upgrade process has failed for the specified device.

Recommended Action Retry the upgrade operation again. If the affected card remains disabled by the system after attempts to retry the upgrade, copy the message exactly as it appears on the console or in the system log. Enter the show hw-module subslot fpd 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 %FPD_MGMT-3-IMG_CRC_CHECK_FAILED: The FPD image for [chars] (FPD ID [int]) in [chars] file is corrupted - CRC mismatch: current value [hex], expected value [hex]. Please make sure that this is a valid FPD image bundle or package file for card in [chars].

Explanation The image failed the CRC checking process, this indicates a corrupt FPD image bundle or package file.

Recommended Action Ensure that the version of the FPD image package, which is stated in the package filename, matches or is compatible with the Cisco IOS software release that the system is running. If the version is not the correct one, try to obtain the correct one from the Cisco Software Center website. If the problem persists, copy the message exactly as it appears on the console or in the system log. Enter the **show hw-module subslot fpd**, the **show upgrade fpd table**, and the **show upgrade fpd file** *fpd-pkg-url* 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 %FPD_MGMT-3-IMG_DATA_UNCOMPRESS_ERROR: Could not uncompress [chars]
FPD image for [chars] in [chars].

Explanation An error has been detected during the uncompress operation of the compressed FPD image data.

Recommended Action Ensure that the version of the FPD image package, which is stated in the package filename, matches or is compatible with the Cisco IOS software release that the system is running. If the version is not the correct one, try to obtain the correct one from the Cisco Software Center website. If the problem persists, copy the message exactly as it appears on the console or in the system log. Enter the show hw-module subslot fpd, the show upgrade fpd table, and the show upgrade fpd file fpd-pkg-url 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 %FPD_MGMT-3-IMG_VER_NOT_FOUND: FPD image version information is not available for [chars] card in [chars]. All the FPD images will be upgraded to recover from this error.

Explanation The FPD image version information for the specified card is not available because the system was not able to extract this information for all the FPDs in the card. This could be the result of a corrupted FPD image from a power failure.

Recommended Action If the automatic upgrade feature is not enabled, then the affected card will be disabled. If this happens, follow the recommended action described for the FPD_MGMT-5-CARD_DISABLED message.

Error Message %FPD_MGMT-3-INCOMP_BNDL_VER: The selected [chars] file contain an
image bundle that has a version number that is incompatible for this IOS release
- [chars]. Selected version = [int].[int], minimum compatible version =
[int].[int]. Please make sure that this is a valid FPD image [chars] file for card
in [chars].

Explanation The version of the selected FPD image bundle does not contain a valid version number that is compatible for the Cisco IOS release. The major version number should be the same and the minor version number should be at least equal to the minimal required version.

Recommended Action Ensure that the version of the FPD image package, which is stated in the package filename, matches or is compatible with the Cisco IOS software release that the system is running. If the version is not the correct one, try to obtain the correct one from the Cisco Software Center website. If the problem persists, copy the message exactly as it appears on the console or in the system log. Enter the **show hw-module subslot fpd**, the **show upgrade fpd table**, and the **show upgrade fpd file** *fpd-pkg-url* 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 %FPD_MGMT-3-INCOMP_IMG_VER: Incompatible [chars] (FPD ID=[int]) image
version detected for [chars] card in [chars]. Detected version = [int].[int],
minimum required version = [int].[int]. Current HW version = [int].[int].

Explanation An incompatible FPD image version has been detected. The FPD image must be upgraded either automatically or manually to make the card operational. If the automatic upgrade feature is not enabled, or if the system cannot find the necessary FPD image package file, the card will be disabled.

Recommended Action If the automatic upgrade feature is not enabled, then the affected card will be disabled. If this happens, follow the recommended action described for the FPD_MGMT-5-CARD_DISABLED message.

Error Message %FPD_MGMT-3-INVALID_IMAGE_SIZE: The [chars] FPD image from [chars]
file does not have a valid image size: expected size = [dec] bytes, actual size =
[dec] bytes.

Explanation The size of the specified FPD image does not have the expected size. The FPD image bundle or package might not be a valid file.

Recommended Action Ensure that the version of the FPD image package, which is stated in the package filename, matches or is compatible with the Cisco IOS software release that the system is running. If the version is not the correct one, try to obtain the correct one from the Cisco Software Center website. If the problem persists, copy the message exactly as it appears on the console or in the system log. Enter the **show hw-module subslot fpd**, the **show upgrade fpd table**, and the **show upgrade fpd file** *fpd-pkg-url* 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 %FPD_MGMT-3-INVALID_IMG_VER: Invalid [chars] (FPD ID=[int]) image
version detected for [chars] card in [chars].

Explanation The specified field programmable device contains an invalid version for the FPD image, because the system was not able to extract this information from the specified card. A failed upgrade attempt might have corrupted the FPD image identification on the device.

Recommended Action If the automatic upgrade feature is not enabled, the affected card will be disabled. If this happens, follow the recommended action described for the FPD_MGMT-5-CARD_DISABLED message.

Error Message %FPD_MGMT-3-INVALID_PKG_FILE: The indicated file ([chars]) is not a
valid FPD image package file - [chars]

Explanation The file format does not appear to be a valid FPD image package.

Recommended Action Ensure that the version of the FPD image package, which is stated in the package filename, matches or is compatible with the Cisco IOS software release that the system is running. If the version is not the correct one, try to obtain the correct one from the Cisco Software Center website. If the problem persists, copy the message exactly as it appears on the console or in the system log. Enter the show hw-module subslot fpd, the show upgrade fpd table, and the show upgrade fpd file fpd-pkg-url 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.

Explanation The file size of the specified FPD image package does not meet the required minimum size. The file is too small to be a valid FPD image package file.

Recommended Action Ensure that the version of the FPD image package, which is stated in the package filename, matches or is compatible with the Cisco IOS software release that the system is running. If the version is not the correct one, try to obtain the correct one from the Cisco Software Center website. If the problem persists, copy the message exactly as it appears on the console or in the system log. Enter the **show hw-module subslot fpd**, the **show upgrade fpd table**, and the **show upgrade fpd file** *fpd-pkg-url* 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 %FPD_MGMT-3-INVALID_UPGRADE_RESULT: Invalid upgrade result '[int]'
received for the FPD image upgrade of [chars] (FPD ID=[int]) for [chars] card in
[chars].

Explanation There is a problem in the internal software coding. This message should not be seen under normal 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %FPD_MGMT-3-IPC_FAILED: Failed to send IPC message to [chars] in [chars] - [chars]

Explanation The system failed to send a message via IPC to the specified card. The cause of the specific IPC failure is specified in the message text.

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

Error Message FPD_MGMT-3-MAJOR_VER_MISMATCH: Major image version mismatch detected
with [chars] (FPD ID=[int]) for [chars] card in [chars]. Image will need to be
[chars] from version [int].[int] to at least a minimum version of [int].[int].
Current HW version = [int].[int].

Explanation A major image version mismatch has been detected. This incompatibility will need to be resolved by doing an upgrade or downgrade operation, either automatically, or manually, to make the card operational. If the automatic upgrade feature is not enabled, or if the system cannot find the necessary FPD image package file, then the card will be disabled.

Recommended Action If the automatic upgrade feature is not enabled, the affected card will be disabled. If this happens, you can perform the upgrade using the **upgrade hw-module** privileged EXEC command. For more information about these commands, refer to the FPD image upgrade feature documentation in the software configuration guide for the target card.

Error Message %FPD_MGMT-3-MISSING_BUNDLE_ENTRY: Failed to find a matching entry in the programmable device bundle information table.

Explanation There is a problem in the internal software coding. This message should not be seen under normal 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %FPD_MGMT-3-MISSING_DEV_INFO: Could not find [chars] (FPD ID=[int])
information for [chars] card in [chars].

Explanation There is a problem in the internal software coding. This message should not be seen under normal 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %FPD_MGMT-3-MISSING_IMAGE: Could not find the required [chars] image (FPD ID=[int] and FPD version=[int].[int] compatible with HW version=[int].[int]) from the [chars]-fpd.bndl bundle in [chars] file. Please make sure that this is a valid FPD image [chars] file for [chars] card in [chars].

Explanation The specified FPD image bundle or package file might not be the correct one. If this is an FPD image package file, then an incompatible package file might have been renamed with a filename that matched the one that the system is expecting for this Cisco IOS software release. You should never rename an FPD image package file name.

Recommended Action Ensure that the version of the FPD image package, which is stated in the package filename, matches or is compatible with the Cisco IOS software release that the system is running. If the version is not the correct one, try to obtain the correct one from the Cisco Software Center website. If the problem persists, copy the message exactly as it appears on the console or in the system log. Enter the **show hw-module subslot fpd**, the **show upgrade fpd table**, and the **show upgrade fpd file** *fpd-pkg-url* 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.

Explanation The system cannot access the required file from the specified URL.

Recommended Action Ensure that the specified URL is a valid path and the system has access to the file system where the file has been placed.

Explanation The system does not have enough free main memory to download the bundle file.

Recommended Action Make sure that the system main memory size meets the minimum requirement that is specified in the Cisco IOS software release note. If the system meets the minimum requirement for this Cisco IOS software release, make sure that the amount of free main memory in the system also meets the minimum memory required to use this software feature. Enter the show memory command to find out this information and add more main memory if it is necessary. If the system meets all the memory requirements, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support

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

Error Message FPD_MGMT-3-PKG_VER_MISMATCH_NOTE: The FPD image package being used ([chars]) is not the right version for this IOS version (it appears that a '[chars]' package was renamed to '[chars]'). An attempt to find the required FPD image will still be performed with this package.

Explanation The indicated FPD image package that is being used in FPD automatic upgrade does not contain the correct version information for the Cisco IOS version that is running in the system. This condition can occur if a different version of the FPD image package was renamed to match the filename that the Cisco IOS image is expecting to use. The upgrade operation will still be performed by trying to find the required FPD image from the renamed package file.

Recommended Action If the upgrade operation fails because the required FPD image cannot be found with the renamed FPD image package, replace the wrong package file with a valid one and perform the upgrade operation again.

Error Message %FPD_MGMT-3-PKG_FILE_SEARCH_FAILED: FPD image package ([chars])
cannot be found in system's flash card or disk to do FPD upgrade.

Explanation By default, if the **upgrade fpd path** *fpd-pkg-url* global configuration command is not configured, then the system will try to locate the required FPD image package file from removable flash cards or disks that are accessible by the system for an FPD upgrade. This message indicates that the system could not find the package file.

Recommended Action Make sure that the specified FPD image package file is copied into a flash card or disk that is accessible by the system, then restart the FPD upgrade by reinserting the target card or entering a system command to reload or power-cycle the target card.

Error Message %FPD_MGMT-3-PKG_VER_FILE_EXTRACT_ERROR: Cannot extract the [chars]
version file from [chars] - [chars]

Explanation There is a package version file extraction error. The cause of the failure is specified in the message. The specified file might not be a valid FPD image package file.

Recommended Action Ensure that the version of the FPD image package, which is stated in the package filename, matches or is compatible with the Cisco IOS software release that the system is running. If the version is not the correct one, try to obtain the correct one from the Cisco Software Center website. If the problem persists, copy the message exactly as it appears on the console or in the system log. Enter the **show hw-module subslot fpd**, the **show upgrade fpd table**, and the **show upgrade fpd file** *fpd-pkg-url* 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 %FPD_MGMT-3-READ_BNDL_HDR_ERROR: Failed to read the FPD bundle header from [chars] file.

Explanation The specified file might not be a valid FPD image bundle or package file.

Recommended Action Ensure that the version of the FPD image package, which is stated in the package filename, matches or is compatible with the Cisco IOS software release that the system is running. If the version is not the correct one, try to obtain the correct one from the Cisco Software Center website. If the problem persists, copy the message exactly as it appears on the console or in the system log. Enter the **show hw-module subslot fpd**, the **show upgrade fpd table**, and the **show upgrade fpd file** *fpd-pkg-url* 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 %FPD_MGMT-3-READ_ERROR: Could not read the [chars] file.

Explanation The system cannot read the required file from the specified URL.

Recommended Action Make sure that the specified URL is a valid path and that the system has access to the file system where the file has been placed.

Error Message %FPD_MGMT-3-SEND_IMG_FAILED: [chars] (FPD ID=[int]) image for [chars]
card in [chars] has failed to be sent for upgrade operation - [chars]

Explanation The FPD image was not able to be sent for the upgrade operation. The system might be too busy to handle this operation. The affected card will be disabled by this failure.

Recommended Action Wait until the system load is lower to try again with the manual upgrade procedure by using the **upgrade hw-module** privileged EXEC command. If the symptom 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 %FPD MGMT-3-SW ERROR: NULL

Explanation There is a problem in the internal software coding. This message should not be seen under normal 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %FPD_MGMT-3-TOO_MANY_FPD_ENTRIES: Too many FPD entries for the FPD
Bundle Info Table. Required number of entries = [int], maximum number of entries
allowed = [int].

Explanation There is a problem in the internal software coding. This message should not be seen under normal 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %FPD_MGMT-3-UNKNOWN_BNDL_HDR_FORMAT: Unknown header format version:
[hex]

Explanation There is a problem in the internal software coding. This message should not be seen under normal 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %FPD_MGMT-3-UPGRADE_LIST_FULL: Could not add a new entry in the FPD
Management Upgrade List. No upgrade will be performed for the [chars] card in
[chars].

Explanation There is a problem in the internal software coding. This message should not be seen under normal operation.

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

Error Message %FPD_MGMT-3-WRONG_IMG_DATA_LEN: The FPD image for [chars] (FPD ID
[int]) in [chars] file contains wrong data length: total data length (with padding)
= [int] bytes, data length = [int] bytes. Please make sure that this is a valid
FPD image bundle or package file for card in [chars].

Explanation The specified file might not be a valid FPD image bundle or package file for the card.

Recommended Action Ensure that the version of the FPD image package, which is stated in the package filename, matches or is compatible with the Cisco IOS software release that the system is running. If the version is not the correct one, try to obtain the correct one from the Cisco Software Center website. If the problem persists, copy the message exactly as it appears on the console or in the system log. Enter the **show hw-module subslot fpd**, the **show upgrade fpd table**, and the **show upgrade fpd file** *fpd-pkg-url* 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 %FPD_MGMT-3-WRONG_IMG_HDR_LEN: The FPD image for [chars] (FPD ID
[int]) in [chars] file contains wrong header length: [int] bytes (expected [int]
bytes). Please make sure that this is a valid FPD image bundle or package file for
card in [chars].

Explanation The specified file might not be a valid FPD image bundle or package file for the card.

Recommended Action Ensure that the version of the FPD image package, which is stated in the package filename, matches or is compatible with the Cisco IOS software release that the system is running. If the version is not the correct one, try to obtain the correct one from the Cisco Software Center website. If the problem persists, copy the message exactly as it appears on the console or in the system log. Enter the **show hw-module subslot fpd**, the **show upgrade fpd table**, and the **show**

upgrade fpd file fpd-pkg-url 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 %FPD_MGMT-3-WRONG_IMG_MAGIC_NUM: The FPD image for [chars] (FPD ID [int]) in [chars] file contains wrong magic number: [hex] (expected [hex]). Please make sure that this is a valid FPD image bundle or package file for card in [chars].

Explanation The specified file might not be a valid FPD image bundle or package file for the card.

Recommended Action Ensure that the version of the FPD image package, which is stated in the package filename, matches or is compatible with the Cisco IOS software release that the system is running. If the version is not the correct one, try to obtain the correct one from the Cisco Software Center website. If the problem persists, copy the message exactly as it appears on the console or in the system log. Enter the show hw-module subslot fpd, the show upgrade fpd table, and the show upgrade fpd file fpd-pkg-url 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 %FPD_MGMT-3-WRONG_IMG_MAJOR_VER: The selected FPD image for upgrade
contains wrong FPD image major version number = '[int]' (expected number = '[int]')
for [chars] (FPD ID [int]). Please make sure that the file being used for upgrade
is a valid FPD image [chars] for card in [chars].

Explanation The file used for upgrade might not be a valid FPD image bundle or package file for the card.

Recommended Action Ensure that the version of the FPD image package, which is stated in the package filename, matches or is compatible with the Cisco IOS software release that the system is running. If the version is not the correct one, try to obtain the correct one from the Cisco Software Center website. If the problem persists, copy the message exactly as it appears on the console or in the system log. Enter the **show hw-module subslot fpd**, the **show upgrade fpd table**, and the **show upgrade fpd file** *fpd-pkg-url* 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.

FPD MGMT-4

Error Message %FPD_MGMT-4-BYPASS_AUTO_UPGRADE: The automatic FPD image upgrade
feature is not enabled, bypassing the image upgrade for [chars] card in [chars].

Explanation The automatic FPD image upgrade feature is not enabled. The incompatible image will not be automatically upgraded. The card will be disabled until the image is upgraded to a compatible version.

Recommended Action Enable the automatic FPD image upgrade by entering the **upgrade fpd auto** global configuration command, or enter the **upgrade hw-module** privileged EXEC command for a manual upgrade operation. For more information about these commands, refer to the FPD image upgrade feature document for the target card. (This documentation can be found in the software configuration guide for the target card.)

Error Message %FPD_MGMT-4-CFG_NOT_SYNCED: Failed to sync "[chars]" command to standby: [chars]

Explanation A FPD configuration command failed to get synced to standby RP due to the indicated error condition. Usually this can happen if the standby RP hardware doesn't support the type of filesystem supported on the active one.

Recommended Action Configure again the command with a filesystem that is supported on both standby and active RP. To find out if a specific filesystem is also supported on standby RP, the **dir**? command can be used to display a list of filesystem supported on both standby and active RP.

Error Message %FPD_MGMT-4-UPGRADE_EXIT: Unexpected exit of FPD image upgrade
operation for [chars] card in [chars].

Explanation The FPD image upgrade operation was interrupted by the physical removal of the card from the system or by the use of other commands that have interrupted the normal operation of the target card. The partial upgrade operation might have left the card unusable because of corrupted FPD images.

Recommended Action If the card does not come up after reinserting into the system, perform the recovery upgrade operation by entering the **upgrade hw-module** privileged EXEC command. With this command, the system will attempt to reprogram the image to recover from the previous partial upgrade operation. For more information about performing a recovery upgrade operation, refer to the FPD image upgrade feature document for the target card (this documentation can be found in the software configuration guide for the target card).

Error Message %FPD_MGMT-4-VERSION_CHECK_ABORTED: FPD image version check operation has been aborted for [chars] card in [chars] because manual upgrade has already being started.

Explanation The FPD image version check operation required for the automatic upgrade feature is not being performed for the specified card because the **upgrade hw-module** privileged EXEC command has already being executed. These two operations cannot be performed at the same time.

Recommended Action If an automatic upgrade operation is required, do not enter the **upgrade hw-module** privileged EXEC command for the manual upgrade while the target card is initializing. Enter the **show hw-module subslot fpd** command and ensure that the target card is displayed in the command output before proceeding with the manual upgrade.

FPD MGMT-5

Error Message %FPD_MGMT-5-CARD_DISABLED: [chars] card in [chars] is being disabled because of an incompatible FPD image version. Note that the [chars] package will be required if you want to perform the upgrade operation.

Explanation The specified card contains an incompatible FPD image version, and is being disabled to avoid operational problems with the existing Cisco IOS software. This can happen if the automatic upgrade feature has not been enabled with the **upgrade fpd auto** global configuration command, if the automatic upgrade operation failed to perform the required upgrade, or because it could not find the necessary FPD image package file. Upgrade the incompatible image so that the system can enable the card.

Recommended Action The FPD image upgrade can be performed automatically by making sure that the automatic upgrade feature is enabled with the **upgrade fpd auto** global configuration command and the necessary FPD image package file is located in the system's default file system (for instance, disk0:) or in a location specified by the **upgrade fpd path** *directory-url* global configuration command. When the automatic upgrade feature is enabled, the upgrade is triggered by the reinsertion of the card into the system or the use of a system command to reload or power-cycle the target card. nother way to perform the upgrade is through the use of the **upgrade hw-module** privileged EXEC command. For more information about these commands, refer to the FPD image upgrade feature document for the target card (this documentation can be found in the software configuration guide for the target card).

Error Message %FPD_MGMT-5-POST_UPGRADE_REMINDER: [chars] card in [chars] will
require a [chars] for the FPD image upgrade to take effect.

Explanation The indicated card will require manual intervention after the FPD image upgrade. The specified operation is required for the upgraded FPD image to take effect.

Error Message No action is required.%FPD_MGMT-5-CARD_POWER_CYCLE: [chars] card in [chars] is being power cycled for the FPD image upgrade to take effect.

Explanation The specified card is being power cycled after the FPD image upgrade. This action allows the target card to be operational with the new upgraded FPD image or images.

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

Error Message %FPD_MGMT-5-UPGRADE_ATTEMPT: Attempting to automatically upgrade the FPD image(s) for [chars] card in [chars]. Use 'show upgrade fpd progress' command to view the upgrade progress ...

Explanation The automatic FPD image upgrade feature is enabled with the **upgrade fpd auto** global configuration command. The system is currently upgrading an incompatible image version automatically.

Recommended Action The upgrade process can take a long time. The FPD_MGMT-6-UPGRADE_TIME message gives an estimate of the total upgrade time. No action is required.

FPD_MGMT-6

Error Message %FPD_MGMT-6-BUNDLE_DOWNLOAD: Downloading FPD image bundle for [chars]
card in [chars] ...

Explanation The system is downloading the field programmable device image bundle to the system main memory.

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

Error Message %FPD_MGMT-6-OVERALL_UPGRADE: All the attempts to upgrade the required
FPD images have been completed for [chars] card in [chars]. Number of
successful/failure upgrade(s): [int]/[int].

Explanation All the FPD image upgrades have completed for the specified card.

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

Error Message %FPD_MGMT-6-PENDING_UPGRADE: [int] more FPD image upgrade operation will be required on [chars] in [chars] after additional power-cycle operation on the target card.

Explanation All upgrade operations have not completed, and additional power-cycle operations are required before the upgraded or new FPD image will be applied to the system configuration. The message text specifies the number of pending upgrade operations that will be performed. More than one power-cycle operation might be required to complete the overall upgrade process.

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

Error Message %FPD_MGMT-6-UPGRADE_PASSED: [chars] (FPD ID=[int]) image in the
[chars] card in [chars] has been successfully updated from version [chars] to
version [int].[int]. Upgrading time = [time-stamp]

Explanation The FPD image upgrade process has completed successfully for the specified device.

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

Error Message %FPD_MGMT-6-UPGRADE_RETRY: Attempting to recover from the failed
upgrades ...

Explanation Because of an image upgrade failure, the system will attempt another upgrade operation for the same FPD image.

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

Error Message %FPD_MGMT-6-UPGRADE_START: [chars] (FPD ID=[int]) image upgrade in
progress for [chars] card in [chars]. Updating to version [int].[int]. PLEASE DO
NOT INTERRUPT DURING THE UPGRADE PROCESS (estimated upgrade completion time =
[time-stamp]) ...

Explanation The FPD image upgrade process has started. Do not interrupt the upgrade operation because any interruption could render the target card unusable. Avoid actions such as removing the target card from the system, powering off the system, or using commands that can power-cycle the target card during the upgrade process.

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

Error Message %FPD_MGMT-6-UPGRADE_TIME: Estimated total FPD image upgrade time for
[chars] card in [chars] = [time-stamp].

Explanation The estimated total time for all FPD images to be upgraded is displayed for the specified card.

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

FPOE DB Messages

This section contains fabric port of exit (FPOE) messages.

FPOE DB-4

Error Message FPOE_DB-4-ENTRY_USAGE_ABOVE: FPOE DB entry usage is above
[dec]%<[dec] of [dec] >

Explanation FPOE database entry usage went above the warning threshold.

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 FPOE_DB-4-ENTRY_USAGE_BELOW: FPOE DB entry usage is below
[dec]%<[dec] of [dec] >

Explanation FPOE database entry usage went below the warning threshold.

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 FPOE_DB-4-ENTRY_USAGE_FULL: FPOE DB entry usage is full <[dec] of
[dec] >

Explanation The FPOE database entry usage is full.

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 FPOE_DB-4-ENTRY_USAGE_NOT_FULL: FPOE DB entry usage is not full
<[dec] of [dec] >

Explanation The FPOE database entry usage is not full.

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.

FR Messages

This section contains Frame Relay (FR) messages.

FR-3

 $\label{lem:condition} \textbf{Error Message} ~\$ \texttt{FR-3-FR_PVC_STATUS_Q_CREATE_ERROR: FR PVC status event queue error:} \\ \texttt{failed to create queue}$

Explanation Unable to create FR PVC status event 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 you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message FR-3-MAP DELETE ERROR: [chars]

Explanation An error occurred while deleting a Frame Relay map.

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

Error Message FR-3-MFR_UNEXPECTEDEVENT: MFR Timer process error: event table is NULL
for event [dec], state [dec]

Explanation The event was ignored because the state transition table is NULL. Normal processing continues.

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 %FR-3-SVC_SETUP: [chars]: interface [chars]: DLCI [dec]

Explanation An error occurred while attempting to set up a Frame Relay SVC. There may have been an attempt to set up an SVC using a DLCI that is already in use.

Recommended Action Check if the DLCI is already in use. For example, a PVC may be configured to use the same DLCI by entering the **show frame-relay pvc** command. If so, remove the configuration.

FR-5

Error Message %FR-5-CONVERT_ROUTE: Converting route pair to connect

Explanation A pair of Frame Relay routes is being converted to connections.

Recommended Action No action is required.

FR_ADJ Messages

This section contains Frame Relay adjacency messages.

Error Message %FR_ADJ-3-ADD_MEMBER: Unable to add adjacency for vc-bundle [chars]
member [dec]

Explanation An error occurred while adding an adjacency for a VC-bundle member.

Recommended Action Delete the VC bundle and reconfigure on the same interface.

Error Message %FR_ADJ-3-ARRAY_FULL: Unable to setup adjacencies for vc-bundle
[chars]

Explanation An error occurred while setting up VC-bundle adjacencies.

Recommended Action Try shutting down the subinterface on which the VC bundle is configured. After a minute or so, verify that the adjacencies on the subinterface have been deleted. Reconfigure the VC bundle.

Error Message %FR_ADJ-3-ARRAY_INDEX_ERROR: Adjacency array index is incorrect for vc-bundle [chars] member [dec]

Explanation An error occurred while setting up VC-bundle adjacencies.

Recommended Action Try shutting down the subinterface on which the VC bundle is configured. After a minute or so, verify that the adjacencies on the subinterface have been deleted. Reconfigure the VC bundle.

FR_HA Messages

This section contains frame relay redundancy messages.

FR_HA-3

Error Message %FR_HA-3-ISSU: [chars]: [chars]

Explanation A Frame Relay ISSU 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 %FR HA-3-SYNC: [chars]: code [dec]

Explanation An error occurred when synchronizing the Frame Relay state to the standby route processor. This may affect nonstop forwarding capability on Frame Relay interfaces during and after switchover until the state is recovered through normal protocol operation.

Recommended Action Reset the standby processor to attempt the synchronization 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.

FRR OCE Messages

This section contains Fast Reroute OCE messages.

FRR OCE-3

Error Message %FRR_OCE-3-GENERAL: [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 %FRR_OCE-3-INVALIDPAR: [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 %FRR_OCE-3-NULLPOINTER: [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.

FR_RP Messages

This section contains Frame Relay Route Processor (FR_RP) messages.

FR_RP-3

Error Message FR_RP-3-IPC_STATS_INVALID_DLCI: Error processing IPC msg - msg type
[chars]

Explanation An error occurred while an IPC statistics message was being 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 FR_RP-3-IPC_STATS_INVALID_INTERFACE: Error processing IPC msg - msg
type [chars]

Explanation An error occurred while an IPC statistics message was being processed.

Error Message FR_RP-3-IPC_STATS_INVALID_MSG: Error processing IPC msg - msg type
[chars]

Explanation An error occurred while an IPC statistics message was being 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 FR_RP-3-IPC_STATS_MISC: Error processing IPC msg - [chars]

Explanation An error occurred while an IPC statistics message was being 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.

FR_VCB Messages

This section contains Frame Relay VC bundle messages.

FR VCB-3

Error Message FR_VCB-3-ADJ_SRC_ERROR: Error sourcing adjacency - vc-bundle [chars]
dlci [dec]

Explanation An error occurred while setting up the adjacency for a member PVC.

Recommended Action Reconfigure the VC bundle. 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 %FR_VCB-3-BUMPING: Bumping error - vcb [chars] - [chars]

Explanation An error occurred while bumping traffic in a VC bundle.

Recommended Action As a workaround, reconfigure the VC bundle to avoid bumping.

Error Message %FR_VCB-3-CONFIG: Configuration error - vcb [chars] - [chars]

Explanation An error occurred while interpreting the VC bundle configuration.

Recommended Action Try reconfiguring the VC bundle.

Error Message %FR_VCB-3-FIBSW_MISSING_TABLE_ENTRY: FIB switching error - vc-bundle
[chars]

Explanation An error occurred while FIB switching packet(s) across a VC bundle.

Recommended Action As a workaround, delete the VC bundle and use a PVC to substitute for the VC bundle.

Error Message %FR VCB-3-PROCESS SWITCHING: Switching error - vcb [chars] - [chars]

Explanation An error occurred while switching packets across a VC bundle.

Recommended Action As a workaround, delete the VC bundle and employ a PVC to substitute for the VC bundle.

FR VCB-5

Error Message %FR_VCB-5-UPDOWN: FR VC-Bundle [chars] changed state to [chars]

Explanation The state of a Frame Relay VC bundle changed to up/down.

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

FR_VIP Messages

This section contains Frame Relay VIP messages.

FR VIP-3

Error Message %FR_VIP-3-INCONSISTENT: Invalid state on VIP: DLCI [dec]: Slot [dec]:
Error code [dec]

Explanation An error occurred while the Frame Relay state of the VIP was being processed.

Recommended Action Enter the **shutdown** and **no shutdown** commands to disable and enable the Frame Relay-encapsulated interface for the specified slot.

Error Message %FR_VIP-3-MISSING_STATE: Missing state on VIP: DLCI [dec]: Slot [dec]

Explanation An error occurred while an IPC statistics unit was being prepared.

Recommended Action Enter the **shutdown** and **no shutdown** commands to disable and enable the Frame Relay-encapsulated interface for the specified slot.

Error Message %FR_VIP-3-SWITCHING: [chars] DLCI [dec]: [chars]

Explanation An error was detected while a packet was being switched on the VIP.

Recommended Action Enter the shutdown and no shutdown commands to disable and enable the Frame Relay-encapsulated interface for the specified slot, or unconfigure then reconfigure the interface. If this does not solve the problem, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

FR VIP-5

Error Message %FR VIP-5-FLUSH: Flushing frame relay state

Explanation The Frame Relay state of the VIP card is being cleared.

Recommended Action No action is required.

FS_IPHC Messages

This section contains Fast IP Header Compression messages.

FS IPHC-2

Error Message %FS_IPHC-2-LC_IPHC_SETUP_FAIL: Failed to initialise or allocate
memory for IP Compression database.

Explanation The IP compression main database could not be created because of a lack of memory resources. The line card cannot allocate memory for an IP compression database.

Recommended Action If possible, add more memory to the VIP. Obtain more free memory on the VIP by reducing the features that are used or buffer allocations. Enter the **ip rtp compression-connections** command in interface configuration mode to reduce the number of contexts configured on all interfaces on the affected line card.

FS_IPHC-4

Error Message %FS_IPHC-4-LC_IPCSENDFAIL: LC unable to send IPHC msg to RP ([int])

Explanation The IP compression main database could not be created because of a lack of memory resources. The line card cannot allocate memory for an IP compression database.

Recommended Action If possible, add more memory to the VIP. Obtain more free memory on the VIP by reducing the features that are used or buffer allocations. Enter the **ip rtp compression-connections** command in interface configuration mode to reduce the number of contexts configured on all interfaces on the affected line card.

Explanation The line card was unable to send IPHC information to the route processor because of a lack of memory in its private memory pool.

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.

FTTM Messages

This section contains Full Ternary TCAM Manager (FTTM) messages.

FTTM-3

Error Message %FTTM-3-ERROR: [chars]

Explanation An FTTM manager error has occurred. The cause of the error is given in the message itself.

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

FW-3

Error Message %FW-3-SMTP_INVALID_COMMAND: Invalid SMTP command (%s) (total %d chars)
from initiator (%i:%d)

Explanation The CBAC code detected an invalid SMTP command in the inspected SMTP connection. This message indicates that a suspicious violation was detected that may be an attack to the mail server system. The command is rejected and the connection is reset by the firewall immediately.

Recommended Action This message is for informational purposes only, but may indicate a security problem.

FW-4

Error Message %FW-4-ALERT_OFF: %s, count (%d/%d) current 1-min rate: %d

Explanation Either the number of half-open connections or the new connection initiation rate has gone below the max-incomplete low threshold. This message indicates that the rate of incoming new connections has slowed down and is issued only when the max-incomplete low threshold is crossed.

Recommended Action This message is for informational purposes only, but may indicate that an attack has stopped.

Error Message %FW-4-ALERT_ON: %s, count (%d/%d) current 1-min rate: %d

Explanation Either the max-incomplete high threshold of half-open connections or the new connection initiation rate has been exceeded. This error message indicates that an unusually high rate of new connections is coming through the firewall, and a DOS attack may be in progress. This message is issued only when the max-incomplete high threshold is crossed.

Recommended Action This message is for informational purposes only, but may indicate a security problem.

Error Message %FW-4-HOST_TCP_ALERT_ON: Max tcp half-open connections (%d) exceeded
for host %i.

Explanation The max-incomplete host limit of half-open TCP connections has been exceeded. This message indicates that a high number of half-open connections is coming to the protected server, and may indicate that a SYN flood attack is in progress and is targeted to the specified server host.

Recommended Action This message is for informational purposes only, but may indicate that a SYN flood attack was attempted. If this alert is issued frequently and identified to be mostly false alarms, then the max-incomplete host threshold value is probably set too low, and there is a lot of legitimate traffic coming in to that server. In this case, the max-incomplete host parameter should be set to a higher number to avoid false alarms.

Error Message %FW-4-TCP_MAJORDOMO_EXEC_BUG: Majordomo Execute Attack - from %i to %i

Explanation A bug in the Majordomo program will allow remote users to execute arbitrary commands at the privilege level of the server.

Recommended Action For security reasons users should not be allowed to execute programs via e-mail servers. This is a very serious indication that your network may be under attack and the source should be shunned immediately.

Explanation Triggers on any mail message with a "pipe" (I) symbol in the "From:" field.

Recommended Action For security reasons users should not be allowed to execute programs via e-mail servers. This is a very serious indication that your network may be under attack and the source should be shunned immediately.

Explanation Triggers on any mail message with a "pipe" (I) symbol in the "From:" field.

Recommended Action For security reasons users should not be allowed to execute programs via e-mail servers. This is a very serious indication that your network may be under attack and the source should be shunned immediately.

Error Message %FW-4-TCP_SENDMAIL_BAD_TO_SIG: Sendmail Invalid Recipient - from %i
to %i

Explanation Triggers on any mail message with a 'rippe' (I) symbol in the recipient field.

Recommended Action For security reasons users should not be allowed to execute programs via e-mail servers. This is a very serious indication that your network may be under attack and the source should be shunned immediately.

Error Message %FW-4-TCP_SENDMAIL_DECODE: Sendmail Decode Alias - from %i to %i

Explanation Triggers on any mail message with ": decode@" in the header. The decode alias is used to uudecode files and is primarily implemented as a convenience for system administration.

Recommended Action For security reasons users should not be allowed to execute programs via e-mail servers. This is a very serious indication that your network may be under attack and the source should be shunned immediately.

Error Message %FW-4-TCP_SENDMAIL_INVALID_COMMAND: Invalid SMTP command - %i to %i

Explanation Triggers on an invalid SMTP command in the SMTP connection. This message indicates that a suspicious violation was detected that may be an attack to the mail server system.

Recommended Action This is unusual traffic and may warrant investigation.

Error Message %FW-4-TCP_SENDMAIL_INVALID_COMMAND: Invalid SMTP command - %i to %i

Explanation Triggers on an invalid SMTP command in the SMTP connection. This message indicates that a suspicious violation was detetected that may be an attack to the mail server system.

Recommended Action This is unusual traffic and may warrantinvestigation.

Error Message %FW-4-TCP_SENDMAIL_OLD_SIG: Archaic Sendmail Attacks - from %i to %i

Explanation Triggers when "wiz" or "debug" commands are sent to the SMTP port.

Recommended Action For security reasons users should not be allowed to execute programs via e-mail servers. This is a very serious indication that your network may be under attack and the source should be shunned immediately.

Error Message %FW-4-UNBLOCK HOST: New TCP connections to host %i no longer blocked

Explanation New TCP connection attempts to the specified host are no longer blocked. This message indicates that the blocking of new TCP attempts to the specified host has been lifted.

Recommended Action This message is for informational purposed only, but may indicate a SYN flood attack was attempted to the host.

Error Message %FW-4-UNAVAILABLE: %s, count (%d/%d) current 1-min rate: %d

Explanation Either the max-incomplete high threshold of half-open connections or the new connection initiation rate has been exceeded. This error message indicates that an unusually high rate of new connections is coming through the firewall, and a DOS attack may be in progress. This message is issued only when the max-incomplete high threshold is crossed.

Recommended Action This message is for informational purposed only, but may indicate a security problem.

Error Message %FW-4-UNAVAILABLE: %s, count (%d/%d) current 1-min rate: %d

Explanation Either the number of half-open connections or the new connection initiation rate has gone below the max-incomplete low threshold. This message indicates that the rate of incoming new connections has slowed down and is issued only when the max-incomplete low threshold is crossed.

Recommended Action This message is for informational purposed only, but may indicate that an attack has stopped.

Error Message %FW-4-UNAVAILABLE: Archaic Sendmail Attacks - from %i to %i

Explanation Triggers when "wiz" or "debug" commands are sent to the SMTP port.

Recommended Action For security reasons users should not be allowed to execute programs via e-mail servers. This is a very serious indication that your network may be under attack and the source should be shunned immediately.

Error Message %FW-4-UNAVAILABLE: Invalid SMTP command - %i to %i

Explanation Triggers on an invalid SMTP command in the SMTP connection. This message indicates that a suspicious violation was detetected that may be an attack to the mail server system.

Recommended Action This is unusual traffic and may warrantinvestigation.

Error Message %FW-4-UNAVAILABLE: Majordomo Execute Attack - from %i to %i

Explanation A bug in the Majordomo program will allow remote users to execute arbitrary commands at the privilege level of the server.

Recommended Action For security reasons users should not be allowed to execute programs via e-mail servers. This is a very serious indication that your network may be under attack and the source should be shunned immediately.

Error Message %FW-4-UNAVAILABLE: Max tcp half-open connections (%d) exceeded for host %i.

Explanation The max-incomplete host limit of half-open TCP connections has been exceeded. This message indicates that a high number of half-open connections is coming to the protected server, and may indicate that a SYN flood attack is in progress and is targeted to the specified server host.

Recommended Action This message is for informational purposes only, but may indicate that a SYN flood attack was attempted. If this alert is issued frequently and identified to be mostly false alarms, then the max-incomplete host threshold value is probably set too low, and there is a lot of legitimate traffic coming in to that server. In this case, the max-incomplete host parameter should be set to a higher number to avoid false alarms.

Error Message %FW-4-UNAVAILABLE: New TCP connections to host %i no longer blocked

Explanation New TCP connection attempts to the specified host are no longer blocked. This message indicates that the blocking of new TCP attempts to the specified host has been lifted.

Recommended Action This message is for informational purposed only, but may indicate a SYN flood attack was attempted to the host.

Error Message %FW-4-UNAVAILABLE: Sendmail Decode Alias - from %i to %i

Explanation Triggers on any mail message with ": decode@" in the header. The decode alias is used to uudecode files and is primarily implemented as a convenience for system administration.

Recommended Action For security reasons users should not be allowed to execute programs via e-mail servers. This is a very serious indication that your network may be under attack and the source should be shunned immediately.

Error Message %FW-4-UNAVAILABLE: Sendmail Invalid Recipient - from %i to %i

Explanation Triggers on any mail message with a ''pipe'' (I) symbol in the recipient field.

Recommended Action For security reasons users should not be allowed to execute programs via e-mail servers. This is a very serious indication that your network may be under attack and the source should be shunned immediately.

Error Message %FW-4-UNAVAILABLE: Sendmail Invalid Sender - from %i to %i

Explanation Triggers on any mail message with a "pipe" (I) symbol in the "From:" field.

Recommended Action For security reasons users should not be allowed to execute programs via e-mail servers. This is a very serious indication that your network may be under attack and the source should be shunned immediately.

FW-6

Error Message %FW-6-SESS_AUDIT_TRAIL: %s session initiator (%i:%d) sent %u bytes -responder (%i:%d) sent %u bytes

Explanation This message documents the per-session transaction log of network activities. The message is issued at the end of each inspected session and it records the source/destination addresses and ports, as well as the number of bytes transmitted by the client and server.

Recommended Action This message is for informational purposes only, and can be used to collect the basic accounting for the inspected sessions.

Error Message %FW-6-UNAVAILABLE: %s session initiator (%i:%d) sent %u bytes -responder (%i:%d) sent %u bytes

Explanation This message documents the per-session transaction log of network activities. The message is issued at the end of each inspected session and it records the source/destination addresses and ports, as well as the number of bytes transmitted by the client and server.

Recommended Action This message is for informational purposed only, and can be used to collect the basic accounting for the inspected sessions.

FX1000 Messages

This section contains FX1000 messages.

FX1000-1

Error Message %FX1000-1-UNAVAILABLE: %s, initialization failed, no buffer memory

Explanation The GigabitEthernet port initialization failed due to insufficient memory

Error Message %FX1000-1-UNAVAILABLE: Could not initialize structure

Explanation The driver failed to initialize a structure

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

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

FX1000-3

Error Message %FX1000-3-UNAVAILABLE: %s, error interrupt, csr_STATUS=%#x

Explanation The GigabitEthernet controller has signalled an error condition.

Error Message %FX1000-3-UNAVAILABLE: %s, packet too big (%d), src %e, dst %e

Explanation The interface detects a packet larger than what is defined by mtu

Recommended Action Check the other station's MTU setting LOG_STD_NO_ACTION

Error Message %FX1000-3-UNAVAILABLE: FX1000(%d/%d), packet too big (%d), from %e

Explanation The interface detects a packet larger than what is defined by mtu

Recommended Action Check the other station's MTU setting

Error Message %FX1000-3-UNAVAILABLE: FX1000(%d/%d), unknown device (%x)

Explanation Somehow the GE PA does not contain a Gigabit controller chip

Recommended Action Could be a mislabeled PA

Error Message %FX1000-3-UNAVAILABLE: PA bay %u, device number %u: unknown device (%#x)

Explanation Somehow the GE PA does not contain a Gigabit controller 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 you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

FX1000-5

Error Message %FX1000-5-UNAVAILABLE: %s cable/transceiver problem?

Explanation The GigabitEthernet port detects link failure, meaning that it is no longer receiving signals from the LAN. This can be caused by disconnected GigabitEthernet cabling, a transceiver (GBIC)failure, or the remote end has shutdown.

Recommended Action Check your GigabitEthernet wiring and port adapter. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support

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

GBIC Messages

This section contains Gigabit Interface Converter (GBIC) messages.

GBIC-4

Error Message %GBIC-4-CHECK_SUM_FAILED: GBIC EEPROM data check sum failed for GBIC
interface [chars]

Explanation The GBIC was identified as a Cisco GBIC, but the system was unable to read vendor-data information to verify its correctness.

Recommended Action Remove and reinsert the GBIC. If it fails again in the same way, the GBIC may be defective.

Error Message %GBIC-4-NOREAD_VSDATA: Unable to read vendor-specific data for GBIC
interface [chars]

Explanation The GBIC was identified as a Cisco GBIC, but the system was unable to read identifying vendor-specific information to verify its authenticity.

Recommended Action Remove and reinsert the GBIC. If it fails again in the same way, the GBIC may be defective.

 $\label{lem:condition} \textbf{Error Message} \ \ \texttt{\$GBIC-4-UNRECOGNIZED_EXTTYPE: GBIC interface [chars] has unrecognized extended type}$

Explanation The GBIC was identified as a Cisco GBIC, but the system does not recognize its reported extended type code.

Recommended Action Check the list of supported GBICs for this version of the system software. An upgrade may be required for newer GBICs. Even if unrecognized, the GBIC may still operate properly, perhaps with limited functionality.

GBIC-6

Error Message GBIC-6-UNAVAILABLE: Unrecognizable GBIC found in %s (module mask 0x%02x)

Explanation The GBIC presented data to the system which did not correctly identify the type of the GBIC. It will be handled as a 'generic' GBIC.

Recommended Action If the GBIC fails to become operational, carefully reinsert it in the slot. If it continues to fail after reinsertion, the GBIC may be defective or incompatible with the switch.

Error Message GBIC-6-UNAVAILABLE: Unrecognizable GBIC found in %s (serial data 0x%02x)

Explanation The GBIC presented data to the system which did not correctly identify the type of the GBIC. It will be handled as a 'generic' GBIC.

Recommended Action If the GBIC fails to become operational, carefully reinsert it in the slot. If it continues to fail after reinsertion, the GBIC may be defective or incompatible with the switch.

GBIC_1000BASET Messages

This section contains Gigabit Interface Converter (GBIC) module messages.

GBIC_1000BASET-6

Error Message %GBIC_1000BASET-6-UNAVAILABLE: 1000-BaseT GBIC module is detected in
%s. Speed and duplex will be autonegotiated

Explanation 1000-BaseT GBIC modules only support autonegotiation on speed/duplex.

Error Message %GBIC_1000BASET-6-UNAVAILABLE: 1000-BaseT GBIC module is detected in %s. Speed and duplex will be autonegotiated

Explanation 1000-BaseT GBIC modules only support autonegotiation on speed/duplex.

Recommended Action LOG_STD_NO_ACTION

Error Message %GBIC_1000BASET-6-UNAVAILABLE: Configuration ignored. 1000-BaseT GBIC modules only support autonegotiation on duplex.

Explanation 1000-BaseT GBIC modules only support autonegotiation on duplex.

Error Message %GBIC_1000BASET-6-UNAVAILABLE: Configuration ignored. 1000-BaseT GBIC modules only support autonegotiation on duplex.

Explanation 1000-BaseT GBIC modules only support autonegotiation on duplex.

Recommended Action LOG_STD_NO_ACTION

Error Message %GBIC_1000BASET-6-UNAVAILABLE: Configuration ignored. 1000-BaseT GBIC modules only support autonegotiation on speed.

Explanation 1000-BaseT GBIC modules only support autonegotiation on speed.

Error Message %GBIC_1000BASET-6-UNAVAILABLE: Configuration ignored. 1000-BaseT GBIC modules only support autonegotiation on speed.

Explanation 1000-BaseT GBIC modules only support autonegotiation on speed.

Recommended Action LOG_STD_NO_ACTION

 $\label{lem:configuration} \textbf{Error Message} \ \ \text{\ensuremath{$^{\circ}$GBIC_1000BASET-6-UNAVAILABLE:}} \ Configuration \ ignored. \ 1000-BaseT \ GBIC \ modules \ only \ support \ autonegotiation.$

Explanation 1000-BaseT GBIC modules only support autonegotiation.

 $\label{lem:configuration} \textbf{Error Message} ~ \texttt{\%GBIC_1000BASET-6-UNAVAILABLE:} ~ \textbf{Configuration ignored.} ~ \textbf{1000-BaseT GBIC} \\ \textbf{modules only support autonegotiation.}$

Explanation 1000-BaseT GBIC modules only support autonegotiation.

Recommended Action LOG_STD_NO_ACTION

Error Message %GBIC_1000BASET-6-GBIC_1000BASET_NO_CONFIG_NEGOTIATE: Configuration ignored. 1000-BaseT GBIC modules only support autonegotiation.

Explanation 1000-BaseT GBIC modules only support autonegotiation.

Recommended Action No action is required.

GBIC_SECURITY Messages

This section contains Gigabit Interface Converter (GBIC) security check messages.

GBIC_SECURITY-4

Error Message %GBIC SECURITY-4-UNAVAILABLE: EEPROM checksum error for GBIC in %s

Explanation The GBIC in the port specified in the error message has invalid EEPROM data.

Recommended Action Remove the GBIC from the specified port.

Error Message %GBIC_SECURITY-4-UNAVAILABLE: Error in reading GBIC serial ID in %s

Explanation Error when reading GBIC type from EEPROM

Recommended Action Please remove GBIC from this Port

Error Message %GBIC SECURITY-4-UNAVAILABLE: GBIC in %s failed security check

Explanation The GBIC in the port specified in the error message has invalid EEPROM data.

Recommended Action Remove the GBIC from the specified port.

Error Message %GBIC_SECURITY-4-UNAVAILABLE: Internal error occurred in setup for
GBIC interface %s

Explanation The system could not allocate resources, or had some other problem, in the setup for the specified GBIC interface.

Recommended Action Reload the system. If the problem persists, contact TAC.

GBIC SECURITY CRYPT Messages

This section contains Gigabit Interface Converter (GBIC) security check messages.

GBIC SECURITY_CRYPT-4

Error Message %GBIC_SECURITY_CRYPT-4-UNAVAILABLE: GBIC in port %d has bad crc

Explanation The GBIC was identified as a Cisco GBIC, but it does not have valid CRC in the EEPROM data.

Recommended Action Check to see if the Cisco IOS software running on the system supports the GBIC. If the GBIC is newer, a system software upgrade might be required. Even if the GBIC is unrecognized by the system, the GBIC may still operate properly, but might have limited functionality.

Error Message %GBIC_SECURITY_CRYPT-4-UNAVAILABLE: GBIC in port %d manufactured by an unrecognized vendor

Explanation The GBIC was identified as a Cisco GBIC, but the system was unable to match its manufacturer with one on the known list of Cisco GBIC vendors

Recommended Action Check to see if the Cisco IOS software running on the system supports the GBIC. If the GBIC is newer, a system software upgrade might be required.

Error Message %GBIC_SECURITY_CRYPT-4-UNAVAILABLE: Identification check failed for
GBIC in port %d

Explanation The GBIC was identified as a Cisco GBIC, but the system was unable to verify its identity

Recommended Action Check to see if the Cisco IOS software running on the system supports the GBIC. If the GBIC is newer, a system software upgrade might be required. Otherwise, verify that the GBIC was obtained from Cisco or from a supported vendor.

GBIC_SECURITY_UNIQUE Messages

This section contains Gigabit Interface Converter (GBIC) security unique messages.

GBIC_SECURITY_UNIQUE-3

Error Message %GBIC_SECURITY_UNIQUE-3-UNAVAILABLE: GBIC interface %d/%d is a
duplicate of GBIC interface %d/%d

Explanation The GBIC was identified as a Cisco GBIC, but its vendor ID and serial number match that of another interface on the system.

Recommended Action Cisco GBICs are assigned unique serial numbers. Verify that the GBIC was obtained from Cisco or a supported vendor

GBIC_SECURITY_UNIQUE-4

Error Message %GBIC_SECURITY_UNIQUE-4-DUPLICATE_SN: GBIC interface [dec]/[dec] has
the same serial number as another GBIC interface

Explanation The GBIC was identified as a Cisco GBIC, but its serial number matches that of another interface on the system.

Recommended Action Cisco GBICs are assigned unique serial numbers. Verify that the GBIC was obtained from Cisco or a supported vendor.

GDOI Messages

This section contains Group Domain of Interpretation (GDOI) messages.

GDOI-1

Error Message %GDOI-1-GDOI_ACE_DENY: A Group Member ACL policy containing deny was attempted. This is not supported.

Explanation A Group Member ACL policy containing deny was attempted. This is 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.

 $Error\ Message\ \ \ GDOI-1-GDOI_ACL_NUM:$ The ACL has too many entries. GDOI will honor only the first 100 ACL entries specified.

Explanation The ACL has too many entries. GDOI will honor only the first 100 ACL entries 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 you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %GDOI-1-KS_NO_RSA_KEYS: RSA Key - [chars] : Not found, Required for group [chars]

Explanation RSA keys are required for signing and verifying rekey messages, but no RSA keys were found in the key server.

Recommended Action Ask the administrator of the key server to create the required RSA key pair.

Error Message %GDOI-1-UNAUTHORIZED_IDENTITY: Group [chars] received registration
from unauthorized identity: [chars]

Explanation The registration request was dropped because the requesting device was not authorized to join the group.

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 %GDOI-1-UNAUTHORIZED_IPADDR: Group [chars] received registration from unauthorized ip address: [chars]

Explanation The registration request was dropped because the requesting device was not authorized to join the group.

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

 $\label{lem:condition} \textbf{Error Message} \ \ \text{\ensuremath{\$GDOI-1-UNREGISTERED_INTERFACE: Group [chars] received registration from unregistered interface.}$

Explanation Receiving registration from an unregistered interface. Processing has stopped.

GDOI-4

Error Message %GDOI-4-GM_RE_REGISTER: The IPSec SA created for group [chars] may have been expired or cleared. Re-register to KS.

Explanation The IPsec SA created for one group may have been expired or cleared. You need to reregister to the key server (KS).

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

GDOI-5

Error Message %GDOI-5-GM_REGS_COMPL: Registration complete for group [chars] using
address [chars]

Explanation Registration was completed for the specified group.

Recommended Action No action is required.

GEFC Messages

This section contains GE-FC line card messages.

GEFC-3

Error Message %GEFC-3-ACCESS_FAIL: LRC access Failed

Explanation An attempt to access the line card redundancy controller (LRC) 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 %GEFC-3-BDI E ALM: End-to-End Backward Defect Indication [chars]

Explanation An attempt to access the line card redundancy controller (LRC) 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 %GEFC-3-FPGA_NOT_SUPPORT: Jamesport FPGA need upgrade. slot:[dec]
port:[dec] [chars] function

Explanation The FPGA on the Jamesport card requires an upgrade so that it can support JP2 functions.

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

Error Message %GEFC-3-GEFC_INTRPEND: Pending unexpected interrupt [addr [hex] =
[hex]]

Explanation One or more pending unexpected interrupts have occurred.

Error Message %GEFC-3-GEFC_MAGICFAIL: Magic number read failed [[chars]]

Explanation The FPGA has 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 %GEFC-3-GEFC_PTFAILASSERTED: Unexpected portfail asserted

Explanation One or more unexpected port failures have been asserted.

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

Error Message %GEFC-3-GEFC_RDWRFAIL: Read/write failed [[chars]]

Explanation A read or write error occurred while the hardware was being accessed.

Error Message %GEFC-3-IDPROM_ACCESS_FAIL: Access to IDPROM Failed

Explanation An attempt to access to the IDPROM 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 %GEFC-3-INT_LPBK_FAIL: Internal CardLoopback Failed

Explanation An attempt to perform an internal card loopback operation 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 %GEFC-3-KPA_TIMEOUT_ALM: Keep-alive timeout [chars]

Explanation Either normal packets or CDL idle packets were not received.

Error Message %GEFC-3-LASER TX FAULT ALM: Optic Laser Transmit Fault [chars]

Explanation A transceiver laser transmittal fault 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 %GEFC-3-LOSS_OF_LIGHT_ALM: Loss of Light [chars]

Explanation The cable for the transceiver has been cut or removed.

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

Error Message %GEFC-3-LOSS_OF_LOCK_ALM: Transceiver CDR Loss of Lock [chars]

Explanation The CDR is experiencing problems while attempting to lock onto the signal.

Error Message %GEFC-3-LOSS_OF_SYNC_ALM: Transceiver Loss of Sync [chars]

Explanation A loss of synchronization 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 %GEFC-3-MIB_HW_LASER_DOWN_ALM: Laser Disabled [chars] [chars]

Explanation The client laser 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.

Error Message %GEFC-3-MIB_KPA_TIMEOUT_ALM: Keep-alive timeout [chars] [chars]

Explanation Normal packets or CDL idle packets were not received.

Error Message %GEFC-3-MIB_LASER_TX_FLT_ALM: Laser Transmit Fault [chars] [chars]

Explanation A client laser transmittal fault 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 %GEFC-3-MIB_LOSS_OF_LIGHT_ALM: Transceiver Loss of Light [chars]
[chars] [chars]

Explanation No light is being received from the client side.

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

Error Message %GEFC-3-MIB_LOSS_OF_LOCK_ALM: Loss of Lock [chars] [chars] [chars]

Explanation The GEFC has lost its lock on the signal.

Error Message %GEFC-3-MIB_LOSS_OF_SYNC_ALM: Loss of Sync [chars] [chars] [chars]

Explanation The GEFC has lost its synchronization.

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

Error Message %GEFC-3-MIB_SFP_VENDOR_UNKNOWN: Unknown Vendor SFP inserted [chars]
[chars] [chars]

Explanation The SFP is not qualified to work with Cisco products.

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

Error Message %GEFC-3-TX CRC ERR THR ALM: GEFC TX CRC Error Threshold [chars]

Explanation The maximum threshold for transmission CRC errors has been exceeded.

Error Message %GEFC-3-UNKNOWN_SFP_INSERTED: Unknown SFP inserted [chars]

Explanation An unknown SFP has been inserted.

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

GEFC-6

Error Message %GEFC-6-UNAVAILABLE: Flow control become active at slot:%d port:%d

Explanation Flow control 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 %GEFC-6-UNAVAILABLE: Flow control become inactive at slot:%d port:%d

Explanation Flow control deactive

GENERAL Messages

This section contains Zenith route processor messages.

GENERAL-2

Error Message %GENERAL-2-CRITEVENT: [chars]

Explanation A critical 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.

GENERAL-3

Error Message %GENERAL-3-EREVENT: [chars]

Explanation This is a general error message to be used for sanity tests.

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

Error Message %GENERAL-3-WSHALEVENT: [chars]

Explanation This message provides general error information to be used for sanity testing.

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

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

GENERIC SUBBLOCK Messages

This section contains generic subblock messages.

GENERIC_SUBBLOCK-2

Error Message %GENERIC SUBBLOCK-2-UNAVAILABLE: Failed to build message for GSB: %s

Explanation An attempt to build a message for distribution of generic subblock 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 %GENERIC_SUBBLOCK-2-UNAVAILABLE: GSB %s is not ISSU aware. Cannot
distribute it to ISSU-aware slots

Explanation This GSB is expected to be ISSU aware but it is not. IT cannot be distributed safely to ISSU-aware slots as it may not be correctly interpreted

Explanation An attempt to register a new generic subblock type was received after subblocks have already been allocated from the control structure with previously registered types

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

Error Message %GENERIC_SUBBLOCK-2-UNAVAILABLE: Unpacked %d bytes and attempted to
consume %d bytes for GSB: %s

Explanation A discrepancy was detected between length of message expected versus length of message 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

GIGASTACK-1

 $Error\ Message\ \mbox{\em {\it GBIC}}$ GGASTACK-1-UNAVAILABLE: The link neighbor of link %d of Gigastack GBIC in %s did not respond to the loop detection request. If loop topology is deployed, make sure all switches in the stack are running the latest software.

Explanation No acknowledgement for Gigastack loop detection request is received from one of the links on a Gigastack GBIC. Either the neighboring switch does not support Gigastack Loop breaking algorithm, or the link between the two Gigastack GBICs is broken. Under this condition, a Gigastack loop topology will not be automatically detected and the connectivity between switches in the stack could be lost.

Recommended Action If loop topology is used in the Gigastack, make sure the latest software is running on all switches in the stack. Check the Gigastack GBICs involved to make sure they are functioning.

GIGASTACK-3

Error Message %GIGASTACK-3-UNAVAILABLE: Gigastack GBIC in %s initialization failed.

Explanation Gigastack GBIC failed POST.

Recommended Action Remove the Gigastack GBIC and re-insert it into the GBIC slot.

GIGASTACK-6

Error Message %GIGASTACK-6-UNAVAILABLE: Gigastack GBIC in %s is selected as Master Loop Breaker. Link 2 of the Gigastack GBIC is disabled to break the loop.

Explanation Loop is detected in the Gigastack and this Gigastack GBIC is selected as the Master Loop Breaker. Link 2 of this Gigastack GBIC is disabled to break the loop.

Recommended Action LOG_STD_NO_ACTION

Error Message %GIGASTACK-6-UNAVAILABLE: Link loss is detected in the Gigastack loop Link 2 of the Gigastack GBIC in %s is re-enabled.

Explanation Loop formed by Gigastack modules is broken because of link loss. Link 2 of the Master Loop Breaker is re-enabled to replace the broken link

Recommended Action LOG_STD_NO_ACTION

GK Messages

This section contains GK-H.323 Gatekeeper messages.

GK-3

Error Message %GK-3-SUBNET_NOT_FOUND: Subnet not found under specified IP address
[IP_address]/[IP_address].

Explanation Not Available

Recommended Action Not Available

GK-6

Error Message %GK-6-UNAVAILABLE: The IP address which has been changed was the gatekeeper's configured RAS address. Existing RAS clients will no longer be able to reach the gatekeeper.

Explanation The IP address being changed at the interface was statically assigned to the gatekeeper for its RAS signaling via the zone local command. This action will automatically replace the gatekeeper's static RAS address with the new IP address. Since the gatekeeper's old RAS address is no longer valid, existing clients which have registered to this gatekeeper via the old RAS address will no longer be able to communicate with this gatekeeper.

Recommended Action It is the user's responsibility to notify existing RAS clients to re-register their systems to the gatekeeper's new RAS address as shown in the show gatekeeper zone status display

Error Message %GK-6-UNAVAILABLE: The IP address which has been removed was the gatekeeper's configured RAS address. The system will automatically assign a new IP address (if available) to be used as the gatekeeper's RAS address. Existing RAS clients will no longer be able to reach the gatekeeper.

Explanation The IP address being removed at the interface was statically assigned to the gatekeeper for its RAS signaling via the zone local command. This action will automatically remove the gatekeeper's static RAS address. Since the gatekeeper no longer has a configured RAS address, the router will automatically assign an IP address (if there is any) to the gatekeeper. Existing clients which have registered to this gatekeeper via the old RAS address will no longer be able to communicate with this gatekeeper.

Recommended Action It is the user's responsibility to notify existing RAS clients to re-register their systems to the gatekeeper's new RAS address as shown in the show gatekeeper zone status display

 $Error\ Message\ \mbox{\em \%GK-6-UNAVAILABLE:}\$ The connection to GKTMP server $\mbox{\em \%s}\ (\mbox{\em \%i})$ appears to be hung and will be closed.

Explanation Messages are being backed up in the gatekeeper's write queue in the connection with the specified server name. The connection is assumed to have gone bad and the gatekeeper is closing the connection. This implies that messages will not be sent to that server for processing until either the gatekeeper or the server re-initiates the connection.

Recommended Action Check with the specified server for possible connection error.

 $Error\ Message\$ %GK-6-UNAVAILABLE: The gatekeeper's RAS address has been automatically changed by the system. Existing RAS clients may no longer be able to reach the gatekeeper.

Explanation The IP address being changed at the interface causes the system to look for a better IP address to be used for the gatekeeper's RAS address. existing clients which have registered to this gatekeeper via the old RAS address may no longer be able to communicate with this gatekeeper.

Recommended Action It is the user's responsibility to notify existing RAS clients to re-register their systems to the gatekeeper's new RAS address as shown in the show gatekeeper zone status display

GLBP Messages

This section contains Gateway Load Balancing Protocol messages.

GLBP-3

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

GLBP-4

Error Message %GLBP-4-BADAUTH: Bad authentication received from %s, group %d

Explanation Two routers participating in a Gateway Load Balancing Protocol group disagree on the valid authentication string.

Recommended Action Use the **glbp authentication** interface command to repair the GLBP authentication discrepancy between the local system and the one whose IP address is reported.

Error Message %GLBP-4-DUPADDR: Duplicate address %s on %s, sourced by %e

Explanation The IP address in a GLBP message received on the interface is the same as the router's own IP address. This may be because of misconfingration, or because of a malfunctioning switch

Recommended Action Check the configurations on all the GLBP routers, and make sure that any switches you have are functioning properly.

 $Error\ Message\ \mbox{\em \color GLBP-4-UNAVAILABLE:}\ \mbox{\em \color Sup}\ \mbox{\em \color different}$ to the locally configured address \mathbb{\em \color \

Explanation The GLBP virtual IP address contained in the Hello message from the Active router is different to that configured locally.

Recommended Action Check the configuration on all GLBP routers.

Explanation The GLBP virtual IP address contained in the Hello message cannot be learnt as it is already assigned to this interface.

Recommended Action Check the configuration on all GLBP routers.

Explanation The GLBP virtual IP address contained in the Hello message cannot be learnt as it is already assigned to a different GLBP group.

Recommended Action Check the configuration on all GLBP routers.

Error Message %GLBP-4-UNAVAILABLE: %s Grp %d address %s is already assigned to, or overlaps with, an address on another interface or application

Explanation The GLBP virtual IP address contained in the Hello message cannot be learnt as it is already assigned to, or overlaps with, an address on another interface or application.

Recommended Action Check the configuration on all GLBP routers.

 $Error\; Message\; \mbox{\em {\it GLBP-4-UNAVAILABLE:}} \mbox{\em {\it SGrp {\it Moddress {\it Modd$

Explanation The GLBP virtual IP address contained in the Hello message cannot be learnt as it is not within a subnet configured on the interface.

Recommended Action Check the configuration on all GLBP routers and ensure that the virtual IP address is within a configured subnet.

Error Message %GLBP-4-UNAVAILABLE: Bad authentication received from %s, group %d

Explanation Two routers participating in a Gateway Load Balancing Protocol group disagree on the valid authentication string.

Recommended Action Use the glbp authentication interface command to repair the GLBP authentication discrepancy between the local system and the one whose IP address is reported.

Error Message %GLBP-4-UNAVAILABLE: Duplicate address %s on %s, sourced by %e

Explanation The IP address in a GLBP message received on the interface is the same as the router's own IP address. This may be because of misconfingration, or because of a malfunctioning switch

Recommended Action Check the configurations on all the GLBP routers, and make sure that any switches you have are functioning properly.

GLBP-6

Error Message %GLBP-6-UNAVAILABLE: %s Grp %u Fwd %u state %s - %s

Explanation The GLBP forwarder has changed state

Recommended Action LOG STD NO ACTION

Error Message %GLBP-6-UNAVAILABLE: %s Grp %u state %s - %s

Explanation The GLBP gateway has changed state

Recommended Action LOG_STD_NO_ACTION

GPRSFLTMG Messages

This section contains Global Packet Radio Service fault management essages.

GPRSFLTMG-0

Error Message %GPRSFLTMG-0-UNAVAILABLE: %s

Explanation Two reasons for this error message, 1. DHCP Client failed to get started, this could be because of malloc failures. 2. GPRS DHCP Process failed to start

Recommended Action If this error message is seen it is recommended not to use this GGSN for PDP session establishment with SGSN with dynamic IP request. Check the available memory in the box and for the first reason try to get 'debug dhcp detail' before the failure. Contact your technical support representative with the error message you got.

Error Message %GPRSFLTMG-0-UNAVAILABLE: %s

Explanation A Process could not be started

Recommended Action Please contact your technical support representative with the error message you got and with the output of 'show gprs gtp status'.

Error Message %GPRSFLTMG-0-UNAVAILABLE: GSN: %i, TEID: %x, APN: %s, Reason: %d, %s

Explanation Available resources exhausted to continue GGSN service because of the following reasons: 1. Number of pending signaling messages reaches limit. 2. Out of Memory - Insufficient in GGSN. 3. System failure - Permenant system failure has occured.

Recommended Action 1. Check whether you can increase number of PDP that can be handled by GGSN. If the problem recurs, contact your technical support representative with the error message you got and with the output of 'show gprs gtp status'.

Error Message %GPRSFLTMG-0-UNAVAILABLE: GSN: %i, TID: %08x%08x, APN: %s, Reason:
%d, %s

Explanation Available resources exhausted to continue GGSN service because of the following reasons: 1. Number of PDP reaches Limit. 2. Number of Network Initiated PDP reached percentage - Insufficient in GGSN. 3. Number of IP PDP regenerated PPP reaches limit.

Recommended Action 1. Check whether you can increase number of PDP that can be handled by GGSN. If the problem recurs, contact your technical support representative with the error message you got and with the output of 'show gprs gtp status'.

Error Message %GPRSFLTMG-0-UNAVAILABLE: GSN: %i, TID: %08x%08x, APN: %s, Reason:
%d, %s

Explanation You get this error messages because of one of the following reasons: 1. Path fail - No echo message is received from the GSN peer and time out. 3. GGSN service up - GGSN service starts. 4. GGSN service down - GGSN service shutdown. 5. Primary Charging Gateway down - Primary charging gateway is not reachable or unconfigured. 6. Primary Charging Gateway up - Primary Charging gateway is up or its configured . 7. Secondary Charging Gateway up - Secondary Charging Gateway is up or its configured. 8. Secondary Charging Gateway becomes unreachable or unconfigured.

Recommended Action Error messages with reasons 3,6 and 7 are informational. For error messages with the other reasons contact your technical supportrepresentative with the error message you got.

GPRSFLTMG-3

Error Message %GPRSFLTMG-0-RESOURCE: GSN: [IP_address], TID: [hex] [hex], APN:
[chars], Reason: [dec], [chars]

Explanation Available resources exhausted to continue GGSN service because of the following reasons:

- 1. Number of PDP reaches Limit.
- Number of Network Initiated PDP reached percentage Insufficient in GGSN.
- 3. Number of IP PDP regenerated PPP reaches limit.

Recommended Action Check whether you can increase number of PDP that can be handled by GGSN. If the problem recurs, contact your technical support representative with the error message you got and with the output of the **show gprs gtp status** command.

GPRSFLTMG-4

Error Message %GPRSFLTMG-4-UNAVAILABLE: GSN: %i, TEID: %x, APN: %s, Reason: %d, %s

Explanation One of the following Mobility Related problem has occured: 1. MS GPRS Detached. 2. MS GPRS present. 3. MS not GPRS responding for network initiated PDP - MS does not respond for packets initiated by external network. 4. MS Refused for network initiated PDP. 5. IMSI unknown for network initiated PDP.

Recommended Action If the problem recurs, contact your technical support representative with the error message you got

Error Message %GPRSFLTMG-4-UNAVAILABLE: GSN: %i, TEID: %x, APN: %s, Reason: %d, %s

Explanation A PDP Activation has been failed because of one of the following reasons: 1. No RADIUS server present for Authentication - No RADIUS server is configured or configured RADIUS server is not reachable. 2. Authentication fail - Authentication failed for invalid username or password. 3. Missing PAP/CHAP in non-transparent mode - PAP/CHAP IE is missing in the packet in non-transparent mode. 4. Missing username - User name field is not present in the PDP activation Request sent.

Recommended Action 1. Check whether RADIUS server is configured properly and able to ping it. 2. Check whether RADIUS server is configured properly. For the other reasons copy and save the error message with the output of 'show running' command. and contact your technical support representative.

Error Message %GPRSFLTMG-4-UNAVAILABLE: GSN: %i, TEID: %x, APN: %s, Reason: %d, %s

Explanation Failed to allocate IP address dynamically because of one of the following reason: 1. a. DHCP/RADIUS server IP address has been wrongly configured in GGSN. b. DHCP/RADIUS server is reachable but the configuration to allocate IP address might be wrong. or c. Properly configured DHCP/RADIUS server is unreachable. 2. Dynamic IP allocation is disabled in the APN configuration . 3. Missing PAP/CHAP information from radius client in transparent mode - Username and Password is missing in the PDP Activation Request.

Recommended Action 1.a. Check whether the GGSN is conifugred with the valid DHCP/RADIUS server IP address. b. Check whether DHCP/RADIUS server is configured properly to allocate IP address. c. If the configurations are fine, then check whether the server is reachable from GGSN. 2. Configure IP allocation pool as either DHCP proxy client or RADIUS client in the APN. If you could not solve the problem still contact your technical support representative with the error message you got.

Error Message %GPRSFLTMG-4-UNAVAILABLE: GSN: %i, TEID: %x, APN: %s, Reason: %d, %s

Explanation PDP activation has failed due to one of the APN related problem: 1. APN not configured - The APN requested in the PDP Request is not configured in the GGSN router. 2. Subscribe mode on APN but selection mode field not verified. 3. Duplicate static IP address to access same APN. 4. Session already exists for a different APN.

Recommended Action Check the APN configuration correspondingly. If that can't solve the problem, get the output of 'sh run' and 'sh gprs access-point all', copy the error message exactly as it appears, and report to your technical support representative.

Error Message %GPRSFLTMG-4-UNAVAILABLE: GSN: %i, TEID: %x, APN: %s, Reason: %d, %s

Explanation QoS negotitaion/update has failed since resources not available.

Recommended Action Contact your technical support representative with the error messages and the output of command 'sh gprs gtp status'.

Error Message %GPRSFLTMG-4-UNAVAILABLE: GSN: %i, TID: %08x%08x, APN: %s, Reason:
%d, %s

Explanation You get this syslog message due to one of the following reasons: 1. Primary/Secondary Charging gateway configured/unconfigured. 2. GSN GTP' Transfer Failure - Failure in sending CDRs to Charging gateway configured. 3. GSN CGF Echo Request Failure/Restored - Failure/Success of Echo messages sent charging gateway to check the connectivity of the Charging gateway configured. 4. GSN CDR Capacity Full/Free - Status of GSN CDR buffer full/free , the subsequent packet might be dropped if the buffer is full. 5. GSN CDR Discard Notification - a status whether the GSN CDRs are getting discard/buffered.

Recommended Action 1. This is informational . 2. Check whether the charging gateways are configured correctly and are active with the charging functionality. 3. If the configured charging gateway is up and reachable from the GSN, check whether charging function is enabled in the gateway. 4,5. If you have configured gprs char charging-send-buffer-size with minimum bytes, you may configure maximum bytes. If the problem recurs, contact your technical support representative with the error message you got

Error Message %GPRSFLTMG-4-UNAVAILABLE: GSN: %i, TID: %08x%08x, APN: %s, Reason:
%d, %s

Explanation A PDP Activation has been failed because of one of the following reasons: 1. No RADIUS server present for Authentication - No RADIUS server is configured or configured RADIUS server is not reachable. 2. Authentication fail - Authentication failed for invalid username or password. 3. Missing PAP/CHAP in non-transparent mode - PAP/CHAP IE is missing in the packet in non-transparent mode. 4. Missing username - User name field is not present in the PDP activation Request sent.

Recommended Action 1. Check whether RADIUS server is configured properly and able to ping it. 2. Check whether RADIUS server is configured properly. For the other reasons copy and save the error message with the output of 'show running' command. and contact your technical support representative.

Error Message %GPRSFLTMG-4-UNAVAILABLE: GSN: %i, TID: %08x%08x, APN: %s, Reason:
%d, %s

Explanation Failed to allocate IP address dynamically because of one of the following reason: 1. a. DHCP/RADIUS server IP address has been wrongly configured in GGSN. b. DHCP/RADIUS server is reachable but the configuration to allocate IP address might be wrong. or c. Properly configured DHCP/RADIUS server is unreachable. 2. Dynamic IP allocation is disabled in the APN configuration . 3. Missing PAP/CHAP information from radius client in transparent mode - Username and Password is missing in the PDP Activation Request.

Recommended Action 1.a. Check whether the GGSN is conifugred with the valid DHCP/RADIUS server IP address. b. Check whether DHCP/RADIUS server is configured properly to allocate IP address. c. If the configurations are fine, then check whether the server is reachable from GGSN. 2. Configure IP allocation pool as either DHCP proxy client or RADIUS client in the APN. If you could not solve the problem still contact your technical support representative with the error message you got.

Error Message %GPRSFLTMG-4-UNAVAILABLE: GSN: %i, TID: %08x%08x, APN: %s, Reason:
%d, %s

Explanation PDP activation has failed due to one of the APN related problem: 1. APN not configured - The APN requested in the PDP Request is not configured in the GGSN router. 2. Subscribe mode on APN but selection mode field not verified. 3. Duplicate static IP address to access same APN. 4. Session already exists for a different APN.

Recommended Action Check the APN configuration correspondingly. If that can't solve the problem, get the output of 'sh run' and 'sh gprs access-point all', copy the error message exactly as it appears, and report to your technical support representative.

Error Message %GPRSFLTMG-4-UNAVAILABLE: GSN: %i, TID: %08x%08x, APN: %s, Reason:
%d, %s

Explanation QoS negotitaion/update has failed since resources not available.

Recommended Action Contact your technical support representative with the error messages and the output of command 'sh gprs gtp status'.

Error Message %GPRSFLTMG-4-UNAVAILABLE: GSN: %i, TID: %08x%08x, APN: %s, Username:
%s Reason: %d, %s

Explanation One of the following Mobility Related problem has occured: 1. MS GPRS Detached. 2. MS GPRS present. 3. MS not GPRS responding for network initiated PDP - MS does not respond for packets initiated by external network. 4. MS Refused for network initiated PDP. 5. IMSI unknown for network initiated PDP.

Recommended Action If the problem recurs, contact your technical support representative with the error message you got.

GPRSMIB-4

Error Message %GPRSMIB-4-UNAVAILABLE: Invalid GPRSMIB message (msg_type %x)
received

Explanation An internal software error occurred.

Recommended Action Contact your technical support representative.

Error Message %GPRSMIB-4-UNAVAILABLE: fragmentation error (s uid = %x) received

Explanation An internal software error occurred.

Recommended Action contact your technical support representative.

GRIP-2

Error Message %GRIP-2-UNAVAILABLE: Error %s route - null table

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.

GRIP-3

Error Message %GRIP-3-UNAVAILABLE: Invalid number of paths (%d) for %q

Explanation An internal inconsistency was detected in the XNS routing table structure.

Recommended Action Note the parameters associated with this message and call your technical support representative for assistance.

GT64010-1

Error Message %GT64010-1-UNAVAILABLE: DMA interrupt stalled, restarted engine %d

Explanation The driver timed out waiting for completion of DMA task. The DMA engine has been restarted.

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.

GT64010-3

Error Message %GT64010-3-UNAVAILABLE: Attempt to install already installed timer %d

Explanation An attempt was made to initialize a timer element that is 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %GT64010-3-UNAVAILABLE: Interrupt error, c=%#x, m=%#x, rc=%#x

Explanation An unexpected interrupt was registered from a DMA engine that was not initialized by 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 %GT64010-3-UNAVAILABLE: Interrupt error, c=%#x, m=%#x, rc=%#x

Explanation An unexpected timer interrupt was received from a timer element that was not initialized by 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %GT64010-3-UNAVAILABLE: Referencing unused DMA channel %d

Explanation An access to an uninitialized DMA engine was attempted.

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

 $Error\; Message\;$ %GT64120-3-UNAVAILABLE: %d single bit memory errors corrected by the system

Explanation The system has seen so many single bit 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.

GT96100-1

Error Message %GT96100-1-UNAVAILABLE: DMA interrupt stalled, restarted engine %d

Explanation The driver timed out waiting for completion of DMA task. The DMA engine 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.

GT96100-3

Error Message %GT96100-3-UNAVAILABLE: Attempt to install already installed timer %d

Explanation An attempt was made to initialize a timer element that is 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %GT96100-3-UNAVAILABLE: CPU corrected %d single bit memory errors

Explanation The system has seen so many single bit 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.

Error Message %GT96100-3-UNAVAILABLE: Interrupt error, c=%#x, m=%#x, rc=%#x

Explanation An unexpected interrupt was registered from a DMA engine that was not initialized by 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message %GT96100-3-UNAVAILABLE: Interrupt error, c=%#x, m=%#x, rc=%#x

Explanation An unexpected timer interrupt was received from a timer element that was not initialized by 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 %GT96100-3-UNAVAILABLE: Referencing unused DMA channel %d

Explanation An access to an uninitialized DMA engine was attempted.

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

GTP-0

Error Message %GTP-0-UNAVAILABLE: GSN: %i, TEID: %x, APN: %s, Reason: %s

Explanation A PDP context activation failed at the packet parsing state for one of the following reasons: 1. Mandatory IE is missing in the PDP. 2. Mandatory IE incorrect - Mandatory IE has invalid range of value. 3. Mandatory IE out of sequence - The Mandatory IEs are not in sequence. 4. Invalid message format. 5. Optional IE incorrect - Optional IE present in the packet has invalid range of value. 6. Version not support - The GGSN Node does not support the GTP version recieved. 7. Non-charging msg in charging path. 8. Charging msg in GTP path. 9. Unknown GTP message. 10.Message too short - GTP message received is too short to contain all expected inform IE. 11.Unexpected message seen.

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

Error Message %GTP-0-UNAVAILABLE: GSN: %i, TID: %x%x, APN: %s, Reason: %s

Explanation A PDP context activation failed at the packet parsing state for one of the following reasons: 1. Mandatory IE is missing in the PDP . 2. Mandatory IE incorrect - Mandatory IE has invalid range of value. 3. Mandatory IE out of sequence - The Mandatory IEs are not in sequence. 4. Invalid message format. 5. Optional IE incorrect - Optional IE present in the packet has invalid range of value. 6. Version not support - The GGSN Node does not support the GTP version recieved. 7. Non-charging msg in charging path. 8. Charging msg in GTP path. 9. Unknown GTP message. 10.Message too short - GTP message received is too short to contain all expected inform IE. 11.Unexpected message seen.

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

Error Message %GTP-0-UNAVAILABLE: GSN: %i, TID: %x%x, APN: %s, Reason: %s

Explanation Available resources exhausted to continue GGSN service because of the following reasons: 1. Number of pending signaling messages reaches limit. 2. Out of Memory - Insufficient in GGSN. 3. System failure - Permenant system failure has occured.

Recommended Action 1. Check whether you can increase number of PDP that can be handled by GGSN. If the problem recurs, contact your technical support representative with the error message you got and with the output of 'show gprs gtp status'.

GTP-2

Error Message %GTP-2-UNAVAILABLE: GSN service %s changed state to %s

Explanation SGSN service starts or shutdown

Recommended Action If this message recurs, contact your technical support representative.

Error Message %GTP-2-UNAVAILABLE: GTP PDP activation/update failed, GSN: %i, TEID:
%x, Reason: %s

Explanation A PDP context activation failed

Recommended Action If this message recurs, contact your technical support representative.

Error Message %GTP-2-UNAVAILABLE: GTP PDP activation/update failed, GSN: %i, TID:
%x%x, Reason: %s

Explanation A PDP context activation failed

Recommended Action If this message recurs, contact your technical support representative.

GTP-3

Error Message %GTP-3-UNAVAILABLE: APN: %s, Reason: %s

Explanation A required configuration is missing

Recommended Action Please make sure the missing commands are configured

GTP-4

Error Message %GTP-4-UNAVAILABLE: GSN: %i, TID: %x%x, APN: %s, Reason: %s

Explanation GGSN has recieved PDP update request with different Recovery Information Element in the same path.

Recommended Action Contact your technical support representative with the error messages you got.

GTP-6

Error Message %GTP-6-UNAVAILABLE: GSN: %i, TID: %x%x, APN: %s, Reason: %s

Explanation PDP context purged because of PDP context idle timeout

Recommended Action This is purely informational

GULF2488-3

Error Message %GULF2488-3-UNAVAILABLE: gulf2488 channel provisioning failed
(slice:%d ch:%d): %s

Explanation required resources unavailable.

Error Message %GULF2488-3-UNAVAILABLE: gulf2488 channel unprovisioning failed
(slice:%d ch:%d): %s

Explanation required resources unavailable.

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

Error Message %GULF2488-3-UNAVAILABLE: gulf2488 chip initialization failed
(errcode=%d): %s

Explanation required resources unavailable.

Recommended Action Reinsert the linecard. If still fails, do 'test cwtlc show seeprom red', swap hardware, and Copy the error message exactly as it appears, and report it to your technical support representative.

G_QOS_Classify Messages

This section contains messages.

Error Message %G_QOS_CLASSIFY-3-NOMEM: Memory Allocation Failure - [chars]

Explanation Memory required to service one or more Network Processors could not be allocated.

Recommended Action This error may indicate that more memory must be installed on the affected card or platform in order to service all the features and related entities enabled via the configuration. 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 %G_QOS_CLASSIFY-3-QOS_CONFIG: error detected: [chars]

Explanation A QoS policymap classification configuration error was detected.

Recommended Action This configuration error is not considered fatal to the operation of the Network Processors. The software is designed to detect and report the error condition. Change the QOS Policymap Filter configuration to correct the problem.

Error Message %G_QOS_CLASSIFY-4-MACACL_CONFIG: [chars]

Explanation Only source mac address in extended named MAC ACL is supported on X40G linecard interfaces.

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.

GT96100 Messages

This section contains GT96100 DMA controller driver messages.

GT96100-3

Error Message %GT96100-3-ECC: CPU corrected [dec] single bit memory errors

Explanation The system has detected and corrected single-bit errors. The number of errors is displayed in the message text.

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

HA Messages

This section contains high availability system messages.

HA-2

Error Message %HA-2-UNAVAILABLE: %d linecard(s) not quiesced exceeds limit of %d, all slots will be reloaded.

Explanation This is a cutover notice about a High Availability System linecard error condition. The linecard(s) did not quiesce properly. Within the current configuration, the number of errors detected requires the system to do a full reload of all of the linecards.

Recommended Action If you OIR removed the active RSP or have legacy IPs installed in the system this message is normal. Otherwise, copy the notice exactly as it appears. Check both the active system and standby system for messages. Call your technical support representative for assistance.

Error Message %HA-2-UNAVAILABLE: %s %s

Explanation This is a critical error message about a High Availability System interprocess communication status or condition. A message of this type indicates that an interprocess communication failure occurred between the active system and the standby system.

Recommended Action Copy the notice exactly as it appears. Check both the active system and standby system for messages. Call your technical support representative for assistance.

Error Message %HA-2-UNAVAILABLE: %s

Explanation This is a critical error message about a High Availability System cutover status or condition. A message of this type indicates that a critical failure occurred during cutover of the standby system to the active system. Messages of this type indicate that the active system relinquished system control that the standby system failed to properly take over as the active.

Recommended Action Copy the notice exactly as it appears. Check both the active system and standby system for messages. Call your technical support representative for assistance.

Error Message %HA-2-UNAVAILABLE: %s

Explanation This is a critical error message about a High Availability System initialization status or condition. A message of this type indicates that a failure occured during high availability system initialization.

Recommended Action Copy the notice exactly as it appears. Check both the active system and standby system for messages. Call your technical support representative for assistance.

Error Message %HA-2-UNAVAILABLE: %s

Explanation This is an important High Availability System notice logging the state of a system cutover of the standby system to the active system. Messages of this type indicate that the active system reliquished system control and that the standby system is taking over as active.

Recommended Action If the message is due to a failure condition, copy the notice exactly as it appears. Check both the active system and standby system for messages. Call your technical support representative for assistance. If the message is not due to a failure condition, no action is required.

Error Message %HA-2-UNAVAILABLE: CCB playback failed.

Explanation This is a critical error message about a High Availability System status or condition.

Recommended Action Copy the notice exactly as it appears. Check both the active system and standby system for messages. Call your technical support representative for assistance.

Error Message %HA-2-UNAVAILABLE: CCB record failed.

Explanation This is a critical error message about a High Availability System status or condition.

Recommended Action Copy the notice exactly as it appears. Check both the active system and standby system for messages. Call your technical support representative for assistance.

 $Error\ Message\$ %HA-2-UNAVAILABLE: Slot %d did not quiesce, it will be disabled and then reloaded.

Explanation This is a cutover notice about a High Availability System linecard error condition. The linecard did not quiesce properly.

Recommended Action This message is normal if the slot contains a legacy IP. Otherwise, copy the notice exactly as it appears. Check both the active system and standby system for messages. Call your technical support representative for assistance.

HA-3

Error Message %HA-3-UNAVAILABLE: %s

Explanation This is a error message about a High Availability System state syncronization error status or condition.

Recommended Action Copy the notice exactly as it appears. Check both the active system and standby system for messages. Call your technical support representative for assistance.

Error Message %HA-3-UNAVAILABLE: %s

Explanation This is a error message about a High Availability System status or condition.

Recommended Action Copy the notice exactly as it appears. Check both the active system and standby system for messages. Call your technical support representative for assistance.

Error Message %HA-3-UNAVAILABLE: RF event not processed till %d milliseconds. Code
= %d

Explanation The event sent to the redundancy facility was not processed till the specific time delay.

Recommended Action Copy the notice exactly as it appears. Check both the active system and standby system for messages. Call your technical support representative for assistance.

Explanation An error was encountered in reserving the TIF (Channel ID) number meant for a specific physical/logical interface in the standby route processor. This occurs if there is a race condition in the synchronization of TIF numbers and the running configuration from the active route processor to the standby route processor. In most situations, this error is self-correcting.

Recommended Action This error affects the standby route processor only. Upon encountering this error, standby route processor reloads itself automatically and reestablishes synchronization with the active route processor. If the standby does not reload itself automatically, reload it from the active route processor console by entering the how-module standby reload command. If this command fails, reload the standby by entering the hw-module standby reset command. If the standby route processor still does not reload or this error is seen again, collect the output from show c7300, show c7300 ha tif entries, show c7300 ha statistics, show c7300 ha registers, show redundancy, show redundancy state, show redundancy switchover history, show redundancy history, and show checkpoint clients. Also, copy the running configuration and the system messages 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 %HA-3-UNAVAILABLE: Tifkey %llx (Card Type %x, (S)PA Type %x) not present in the Standby Tif table (Hash Slot %d) - Standby Reloading

Explanation The standby route processor encountered an error in the reception of the TIF number (channel ID) for the indicated interface from the active route processor. In most situations, this error is self-correcting.

Recommended Action This error affects the standby route processor only. Upon encountering this error, standby route processor reloads itself automatically and reestablishes synchronization with the active route processor. If the standby does not reload itself automatically, reload it from the active route processor console by entering the how-module standby reload command. If this command fails, reload the standby by entering the hw-module standby reset command. If the standby route processor still does not reload or this error is seen again, collect the output from show c7300, show c7300 ha tif entries, show c7300 ha statistics, show c7300 ha registers, show redundancy, show redundancy state, show redundancy switchover history, show redundancy

history, and **show checkpoint clients**. Also, copy the running configuration and the system messages 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.

HA-4

Error Message %HA-4-DATADESCR_DECODE_ERROR: Failed to decode descriptor %d %u %u %u
%d

Explanation Data descriptors are used to encode an interface index in a compact fashion for transfer to another RP. An interface corresponding to the if_index was not found on the Standby RP. HA synchronization will fail for that interface

Recommended Action If this error recurs, then issue the **show tech-support** and **show logging** commands, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message HA-4-UNAVAILABLE: %s (rc %d, event %s)

Explanation Failure to send 7300 checkpointing 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 you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %HA-4-UNAVAILABLE: %s (rc %d, event %s)

Explanation Failure to send UNIX checkpointing data.

Error Message %HA-4-UNAVAILABLE: %s

Explanation An error was encountered in a data sync 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %HA-4-UNAVAILABLE: %s

Explanation This is a warning message about a High Availability System status, condition, or event.

Recommended Action Copy the notice exactly as it appears. Check both the active system and standby system for messages. Call your technical support representative for assistance.

Error Message %HA-4-UNAVAILABLE: Creation of %s process failed

Explanation Creation of a platform high availability process 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 %HA-4-UNAVAILABLE: Data Encode - %s (%s)

Explanation Failure to encode 7300 checkpointing data descriptors.

Error Message %HA-4-UNAVAILABLE: Data decode - %s (%d)

Explanation Failure to decode 7300 checkpointing data descriptors.

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

Error Message %HA-4-UNAVAILABLE: Failed to allocate buffer for inter-RP IPC message
receive

Explanation An error was encountered in the reception of IPC messages from the peer Route Processor because a packet buffer to receive the packet could not be allocated.

Recommended Action The 'show buffers' command can be used to confirm that the IPC buffer pool is suffering misses. Intermittent errors will be handled by the IPC mechanism of retries. However, if this error message is seen with regularity, the system may need to be upgraded to have more memory as the IPC buffer pool is automatically sized in direct proportion to the total amount of memory in the system. Note that there is no configuration command to resize the IPC buffer pool.

Error Message %HA-4-UNAVAILABLE: Failed to decode descriptor %d %u %u %u %d

Explanation Data descriptors are used to encode an interface index in a compact fashion for transfer to another RP. An interface corresponding to the if_index was not found on the Standby RP. HA synchronization will fail for that 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..

Explanation The peer Route Processor (RP) is not compatible with the active RP and so it will be held in reset state.

Recommended Action The peer RP must be removed and replaced with a RP that is the same type as the active RP to have it successfully boot as the standby.

Explanation The initialization of the standby route processor failed. This will result in the high availability features not being operational.

Recommended Action If additional error messages indicate that the type of the standby RP is incompatible with the current active RP, then that should be fixed by inserting a compatible standby RP. If the standby RP is of a type that is compatible with the active RP, then an attempt should be made to remove and firmly re-insert the standby RP. If the problem persists, please contact your Cisco technical support representative with this information.

Error Message %HA-4-UNAVAILABLE: Platform CF - %s

Explanation Failure in some 7300 checkpointing activity.

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

Error Message %HA-4-UNAVAILABLE: Platform CF - %s

Explanation Failure in some UNIX checkpointing activity.

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

Error Message %HA-4-UNAVAILABLE: Reset of %s RP triggered %s

Explanation Reset of the active RP was triggered by the standby RP in response to some event that caused the standby RP to conclude that the active RP was no longer functional.

Recommended Action The crashing route processor (RP) will produce a crashinfo file and a core dump if that was configured. These files provide information about the events that triggered the RP to reset. Contact your Cisco technical support representative with this information.

Error Message %HA-4-UNAVAILABLE: Unable to lock the configuration session.

Explanation This is a warning message indicating that the configuration session could not be locked. Simultaneous configuration sessions can corrupt the configuration.

Recommended Action Copy the message exactly as it appears. Check both the active system and standby system for messages. Call your technical support representative for assistance.

HA-5

Error Message %HA-5-UNAVAILABLE: %s

Explanation This is a notice message about a High Availability System status, condition, or event.

Recommended Action No action required.

Error Message %HA-5-UNAVAILABLE: %s

Explanation This is a notice message about a High Availability System syncronization status, condition, or event.

Recommended Action No action required.

Error Message %HA-5-UNAVAILABLE: %s hw-module slot %d image %s : %s

Explanation This is a notice message about a High Availability System hardware module configuration status, condition, or event.

Recommended Action Copy the notice exactly as it appears. Check both the active system and standby system for messages. Call your technical support representative for assistance.

Error Message %HA-5-UNAVAILABLE: Active HA version (%u.%u) differs from standby HA version (%u.%u)

Explanation This is a notice about High Availablility System version mismatch between the active and standby systems.

Recommended Action No action required.

Error Message %HA-5-UNAVAILABLE: Active IOS version differs from standby IOS version

Explanation This is a notice about High Availablility System version mismatch between the active and standby systems.

Recommended Action No action required.

 $Error\ Message\$ %HA-5-UNAVAILABLE: Maximum sync retries exceeded. Reloading standby and cancelling sync.

Explanation This is a notice message about a High Availability System syncronization status, condition, or event. The syncronization operation failed.

Recommended Action Copy the notice exactly as it appears. Check both the active system and standby system for messages. Call your technical support representative for assistance.

Error Message %HA-5-UNAVAILABLE: Operating mode is %s, %smode is %s.

Explanation This is a notice about the High Availablility System mode.

Recommended Action Make sure that both the active system and standby systems are correctly configured and operational.

 $Error\ Message\ % HA-5-UNAVAILABLE:$ Reloading standby and retrying sync operation (retry %d).

Explanation This is a notice message about a High Availability System syncronization status, condition, or event. The syncronization operation will be retried.

Recommended Action No action required.

Error Message %HA-5-UNAVAILABLE: Unable to reload the standby. %s

Explanation The active RSP was unable to reload the standby because of the reason indicated in the message. This may be because the slave is in unplugged state, or because there is a redundancy forced switchover process in progress, or because the reload function is incorrectly called from the standby to the active.

Recommended Action If the message says Standby (slave) is unplugged, verify that the slave is properly seated in the chassis. If the message says Switchover is in progress, it means that currently a switchover is in progress, and no action is necessary. If you are getting the message Standby cannot reload the Active, then run the **show logging** and **show tech-support** commands and report the error to your Cisco technical support representative and provide him with the output of the commands.

HA-6

Error Message %HA-6-FALLBACK: [chars] - configured mode([chars]), fallback
mode([chars])

Explanation The specified route processor redundancy mode has fallen back to the mode specified in the message.

Recommended Action No action is required.

Explanation The specified line card cannot coexist with the rest of the system in the current redundancy mode configuration of the system.

Recommended Action No action is required.

Error Message %HA-6-STANDBY_READY: Standby RP in slot [dec] is operational in [chars]mode
The standby route processor is operational.

Recommended Action No action is required.

Error Message %HA-6-SWITCHOVER: Route Processor switched from being standby to being active

Explanation This route processor has switched over to become the active route processor.

Recommended Action No action is required.

Error Message %HA-6-TOOBIG: Running config too big, config sync failed

Explanation The running configuration was too large to be synchronized.

Recommended Action No action is required.

HA CLIENT Messages

Error Message %HA_CLIENT-3-RF_REG_FAILED: RF registration for the %s HA client
failed with return code %u

Explanation The specified HA client failed to register properly with the Redundancy Facility (RF). This should not happen and suggests a software problem.

HA CONFIG SYNC Messages

This section contains high availability configuration synchronization messages.

HA CONFIG SYNC-3

Explanation The active supervisor failed to send the specified boot variable to the standby supervisor. As a result, a subsequent reload or a switchover operation will probably result in the standby supervisor booting a wrong 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 you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %HA_CONFIG_SYNC-3-CONFREG: Cannot communicate config register to standby

Explanation The active supervisor failed to send the configuration register to the standby supervisor. As a result, the active and standby supervisors might not have matching configuration registers.

Error Message %HA CONFIG SYNC-3-FS BULK CFGSYNC: %s [%s]

Explanation A synchronization of the file system bulk configuration has failed. The reason for the failure is provided 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 you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %HA_CONFIG_SYNC-3-ISSU_MTU: CONFIG SYNC Failed to get MTU Size for session[[dec]] msg_type[[dec]], MTU[[dec]], rc[[dec]]

Explanation An ISSU configuration synchronization failed to get the message MTU.

Recommended Action Copy the system's configuration along with any other relevant 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 HA CONFIG SYNC-3-ISSU REG: CONFIG SYNC [chars] rc([dec])

Explanation An ISSU configuration synchronization registration error has occurred.

Error Message HA_CONFIG_SYNC-3-ISSU_XFORM: CONFIG SYNC [chars] msg_type[[dec]],
rc[[dec]]

Explanation An ISSU configuration synchronization failed to transform a message.

Recommended Action Copy the system's configuration along with any other relevant 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.

HA CONFIG SYNC-6

Error Message %HA_CONFIG_SYNC-6-BULK_CFGSYNC_SUCCEED: Bulk Sync succeeded

Explanation A bulk synchronization has succeeded.

Recommended Action No action is necessary.

Error Message %HA_CONFIG_SYNC-6-LBL_PRC_SUBCODE: CONFIG SYNC : Subcode not matching
for command %s Active subcode[0x%x], Standby subcode[0x%x]

Explanation The line-by-line synchronization of a command has succeeded. A command entered on the active system was successfully synchronized with the standby system. However, the subcode of parser return code returned by the active system differed from the subcode returned by the standby system.

Recommended Action Normally, no action is required. If any problems with line-by-line synchronization are found, copy the system's configuration along with any other relevant 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.

HA EM Messages

This section contains Embedded Event Manager (HA_EM) messages.

HA_EM-3

Error Message %HA_EM-3-ACTION_CNS_OPEN_FAIL: [chars]: Unable to open connection to CNS Event Agent: [dec]

Explanation The Cisco Network Services (CNS) action process failed to open a CNS handle to the event agent.

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

Error Message %HA_EM-3-FMC_CBH_PROCESS_CREATE: [chars]: callback handler process
create failed for eid: [dec]

Explanation The process create function reported an error while trying to create the callback handler process.

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

```
Error Message %HA_EM-3-FMC_FH_INIT: [chars]: fh_init failed : [dec]
```

Explanation The fh_init function reported an error while trying to initialize EEM for a callback process.

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

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

Error Message %HA_EM-3-FMPD_ACTION_INFO: [chars]: Error occurred while fetching
action information: [dec].

Explanation The Embedded Event Manager Policy Director failed to gather action information registered for 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %HA_EM-3-FMPD_ADJUST_HIST_SIZE: [chars]: Error attempting to adjust event history table size.

Explanation The Embedded Event Manager policy director could not adjust the size of the event history table.

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

Error Message %HA_EM-3-FMPD_ACTION_NOTRACK: %s: unable to set state for tracking
object number %u; object does not exist or is not a stub-object.

Explanation The Embedded Event Manager applet attempted to set the state of a tracking object that does not exist.

Recommended Action Only set the state of tracking objects that have already been configured in the system. If the message continues to occur, copy the message exactly as it appears, and report it your technical support representative.

Error Message %HA_EM-3-FMPD_CHECKSUM_MISMATCH: %s: file checksum mismatch

Explanation The checksum value of an installed policy does not match the value provided by the installation 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 %HA_EM-3-FMFD_EMPTY_QUEUE: [chars]: The [chars] event detector I/O
queue empty.

Explanation The I/O queue is unexpectedly empty.

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

Error Message %HA EM-3-FMPD ERROR: Error executing applet %s statement %s

Explanation The Embedded Event Manager policy director found an error when processing an applet.

Recommended Action Check syntax of applet statement. If the message continues to occur, copy the message exactly as it appears, and report it your technical support representative.

Error Message %HA_EM-3-FMPD_EXECUTE_CALLBACK: %s: failed to execute callback

Explanation Failed to execute callback routine.

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

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

Error Message %HA_EM-3-FMPD_FH_INIT: %s: could not initialize Embedded Event
Manager service: %s

Explanation An internal error was detected when initializing Embedded Event Manager service.

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

Error Message %HA_EM-3-FMPD_IPC_PORT_CREATE: %s: failed to create an IPC port: %s

Explanation Embedded Event Manager failed to create an IPC port.

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

Error Message %HA_EM-3-FMPD_IPC_PORT_OPEN: %s: failed to open an IPC port: %s

Explanation Embedded Event Manager failed to open an IPC port.

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

Error Message %HA_EM-3-FMPD_IPC_PORT_REGISTER: %s: failed to register an IPC port:
%s

Explanation Embedded Event Manager failed to register an IPC port.

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 %HA_EM-3-FMPD_NOEID: %s: No such event id found.

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 %HA EM-3-FMPD NOESID: %s: No such event spec id found.

Explanation The Embedded Event Manager Policy Director could not find the event for the event spec. 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 %HA_EM-3-FMPD_NO_PROC: %s: Failed to create process

Explanation The process create function reports 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 %HA_EM-3-FMFD_OID_UNAVAIL: %s: The following oid has become
unavailable: %s

Explanation The registered oid is no longer available in 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 %HA_EM-3-FMPD_PROCESS_XML: %s: error processing xml buffer

Explanation An error occurred processing the event publish information xml 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 %HA_EM-3-FMPD_QUEUE_INIT: %s: could not initialize queue

Explanation An internal error was detected when initializing Embedded Event Manager queue.

Error Message %HA_EM-3-FMFD_QUEUE_INIT: [chars]: Unable to initialize queue;

Explanation The queue initialization function reported 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 %HA_EM-3-FMFD_TTY_NUM: [chars]: Error occurred while fetching TTY
number.

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 %HA_EM-3-FMPD_ACTION: [chars]: Error occurred while performing
action: [chars].

Explanation An internal software error has occurred.

Error Message %HA EM-3-FMPD CHECKSUM MISMATCH: [chars]: file checksum mismatch

Explanation The checksum value of a an installed policy does not match the value provided by the installation manager.

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.

 $\label{lem:condition} \textbf{Error Message} ~ \text{%HA_EM-3-FMPD_CHKPT_INIT: [chars]: could not register the application with the checkpointing server: [chars] \\$

Explanation Failed to register an application with the checkpointing 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %HA_EM-3-FMPD_CHKPT_TBL_INFO_READ: [chars]: could not read the
existing table information: [chars]

Explanation Failed to read the existing table information using the checkpointing API.

Error Message %HA_EM-3-FMPD_CHKPT_TBL_INIT: [chars]: failed to initialize [chars]:
[chars]

Explanation Could not initialize a table with the checkpointing 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %HA_EM-3-FMPD_CHKPT_TBL_RECOVER: [chars]: could not recover the checkpointed [chars]: [chars]

Explanation Failed to recover a checkpointed table.

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

Error Message %HA_EM-3-FMPD_CLI_CONNECT: Unable to establish CLI session: [chars]

Explanation Unable to establish a CLI session.

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

Error Message %HA_EM-3-FMPD_CLI_DISCONNECT: Error disconnecting from CLI session:
[chars]

Explanation An error occurred while disconnecting from the CLI session.

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

Error Message %HA_EM-3-FMPD_CLI_NOTTY: Error attempting to access an unopened CLI session: [chars]

Explanation An error occurred while the system attempted to access the specified unopened CLI 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 %HA_EM-3-FMPD_CLI_READ: Unable to read CLI response: [chars]

Explanation Unable to read a CLI response.

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

Error Message %HA EM-3-FMPD CLI WRITE: Unable to send CLI command: [chars]

Explanation Unable to send a CLI command.

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

Error Message %HA_EM-3-FMPD_ERROR: Error executing applet [chars] statement [chars]

Explanation The Embedded Event Manager policy director found an error when processing an applet.

Error Message %HA_EM-3-FMPD_EVM_ASYNC_ATTACH: [chars]: could not attach handler for Event Manager asynchronous event: [chars]

Explanation An internal error was detected when attaching a handler for an Event Manager asynchronous event.

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

Error Message %HA_EM-3-FMPD_EVM_CREATE: [chars]: could not create event manager:
[chars]

Explanation An internal error was detected when creating Event 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 %HA_EM-3-FMPD_EVM_EVENT_BLOCK: [chars]: failed to block waiting for Event Manager events: [chars]

Explanation An internal error was detected when block-waiting for Event Manager events.

Error Message %HA_EM-3-FMPD_EVM_INIT_EVENT: [chars]: could not initialize Event
Manager event: [chars]

Explanation An internal error was detected when initializing an Event Manager 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 %HA_EM-3-FMPD_EVM_MSG_ATTACH: [chars]: could not attach handler for Event Manager message event: [chars]

Explanation An internal error was detected when attaching a handler for an Event Manager message event.

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

Error Message %HA_EM-3-FMPD_EXECUTE_CALLBACK: [chars]: failed to execute callback

Explanation Failed to execute a callback routine.

Error Message %HA_EM-3-FMPD_FH_INIT: [chars]: could not initialize Embedded Event
Manager service: [chars]

Explanation An internal error was detected when initializing the Embedded Event Manager service.

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

Error Message %HA_EM-3-FMPD_GET_PRIO: [chars]: failed to get process priority:
[chars]

Explanation There has been an internal error. A call to get a process-scheduling priority 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 %HA_EM-3-FMPD_IPC_PORT_CREATE: [chars]: failed to create an IPC port:
[chars]

Explanation Embedded Event Manager failed to create an IPC port.

Error Message %HA_EM-3-FMPD_IPC_PORT_OPEN: [chars]: failed to open an IPC port:
[chars]

Explanation Embedded Event Manager failed to open an IPC port.

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

Error Message %HA_EM-3-FMPD_IPC_PORT_REGISTER: [chars]: failed to register an IPC
port: [chars]

Explanation Embedded Event Manager failed to register an IPC port.

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

Error Message %HA_EM-3-FMPD_NOEID: %s: No such event id found.

Explanation The Embedded Event Manager (EEM) policy director could not find a record of the event ID.

Error Message %HA_EM-3-FMPD_NOESID: [chars]: No such event spec id found.

Explanation The Embedded Event Manager policy director could not find the triggered event specification 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 %HA_EM-3-FMPD_NO_PROC: %s: Failed to create process

Explanation The Embedded Event Manager (EEM) policy director could not create a process.

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

Error Message %HA_EM-3-FMPD_OVL_NOTIF_REG: [chars]: could not register for Version
Manager notification: [chars]

Explanation An internal error was detected when registering for Version Manager notification.

Error Message %HA_EM-3-FMPD_POLICY_UNREG_ERR: [chars]: could not unregister policy
[chars]: [chars]

Explanation A registered policy changed or deleted by the last installation update was detected. Because the update used the start option, the old policy was automatically unregistered. This message signaled an unsuccessful unregistration.

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

Error Message %HA_EM-3-FMPD_POLICY_UNREGREG_ERR: [chars]: could not replace policy
[chars]: [chars]

Explanation A registered policy changed by the last installation update was detected. Because the update used the start option, the old policy was automatically replaced by the new policy. This message signaled an unsuccessful replacement of the policy.

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

Error Message %HA EM-3-FMPD PROCESS XML: %s: error processing xml buffer

Explanation An error occurred in processing the event publishing information XML buffer.

Error Message %HA_EM-3-FMPD_PTHRD_CREATE: [chars]: failed to create POSIX thread:
[chars]

Explanation An internal error occurred when trying to create a POSIX thread.

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

Error Message %HA_EM-3-FMPD_QUEUE_INIT: [chars]: could not initialize queue

Explanation An internal error was detected when initializing the Embedded Event Manager 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 %HA_EM-3-FMPD_REQINFO: [chars]: Error attempting to fetch event information: [chars].

Explanation The Embedded Event Manager policy director could not obtain event information.

Error Message %HA_EM-3-FMPD_SET_INFO: [chars]: Error occurred while fetching variable information: [dec].

Explanation An error occurred while attempting to obtain Embedded Event Manager variable 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 %HA_EM-3-FMPD_SMTP_CHK_REPLY: Reply code unexpected from SMTP server:
[chars]

Explanation An unexpected reply code was received from the connected SMTP server.

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

Error Message %HA_EM-3-FMPD_SMTP_CONNECT: Unable to connect to SMTP server: [chars]

Explanation Unable to connect to the SMTP server socket.

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

Error Message %HA_EM-3-FMPD_SMTP_DISCONNECT: Unable to disconnect from SMTP server:
[chars]

Explanation Unable to disconnect from the connected SMTP server.

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

Error Message %HA_EM-3-FMPD_SMTP_READ: Unable to read from SMTP server: [chars]

Explanation Unable to read from the connected SMTP server.

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

Error Message %HA_EM-3-FMPD_SMTP_WRITE: Unable to write to SMTP server: [chars]

Explanation Unable to write to the connected SMTP server.

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

Error Message %HA_EM-3-FMPD_SVCEVM_CREATE: [chars]: could not initialize RPC server
for event manager: [chars]

Explanation Initializing RPC server stub for event manager 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 that you have gathered. Attach the following information to 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 Embedded Event Manager Script Director failed to register with the RPC facility.

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

Error Message %HA_EM-3-FMPD_UNKNOWN_ENV: [chars]: could not find environment variable: [chars]

Explanation The Embedded Event Manager policy director could not find the environment variable specified in the action message.

Error Message %HA_EM-3-FMPD_UNKNOWNTYPE: [chars]: Unknown event type found in applet.

Explanation The Embedded Event Manager applet had an unknown event 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 %HA_EM-3-FMPD_UNKNOWN_ENV: %s: could not find environment variable:
%s

Explanation The Embedded Event Manager policy director could not find the environment variable specified in the action message.

Recommended Action Only use well known Embedded Event Manager environment variables. If the message continues to occur, copy the message exactly as it appears, and report it your technical support representative.

Error Message %HA_EM-3-FMPD_WRONGTYPE: [chars]: Published event type does not match
event spec

Explanation The Embedded Event Manager policy director event specification does not match the published 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 %HA_EM-3-FMS_CNS_FAIL: [chars]: Failed to perform CNS action: [chars]

Explanation The Embedded Event Manager failed attempting to send a CNS 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.

Error Message %HA_EM-3-FMS_EMPTY_QUEUE: [chars]: The I/O queue empty.

Explanation The I/O queue is empty, but it should not be empty.

Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to 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 queue is not in a state to accept packets.

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

Error Message %HA_EM-3-FMS_OPEN: %s: Unable to open %s; %s

Explanation The open function reported an error.

Explanation The checksum computed for the specified policy does not match the original checksum computed when the policy was registered.

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

Error Message %HA_EM-3-FMS_POLICY_HASH: %s: The hash computation routine reported
an error; %s

Explanation The fh hash md5 fd() function reported the specified 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 %HA_EM-3-FMS_POLICY_LOOKUP_FAIL: [chars]: Failed to look up in the table the registration specification for policy [chars].

Explanation A table lookup for the registration specification for the policy has failed.

Error Message %HA_EM-3-FMS_QUEUE_INIT: [chars]: The Unable to initialize queue.

Explanation The queue cannot 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %HA_EM-3-FMS_SWITCH_NOT_RF_ACTIVE: [chars]: This processor is not in
ACTIVE state (state = [dec]). Switchover must be performed on ACTIVE processor.

Explanation Switchovers must occur on the active unit, not the standby unit.

Recommended Action Ensure that the switchover occurs on a unit that is designated as an active unit and not a standby unit.

HA EM-4

Error Message %HA_EM-4-FMPD_EVENT_CREATE: %s: failed to create an event: %s

Explanation Failed to create an Embedded Event Manager 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 %HA_EM-4-FMPD_EVENT_REG: %s: failed to register an event: %s

Explanation Failed to register an Embedded Event Manager 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 %HA_EM-4-FMPD_IPC_GET_PAK: [chars]: failed to allocate an IPC buffer

Explanation Embedded Event Manager failed to allocate a buffer from IPC.

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

Error Message %HA_EM-4-FMPD_IPC_SEND_MSG: [chars]: failed to send an IPC message:
[chars]

Explanation Embedded Event Manager failed to send a message through IPC.

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

Error Message %HA_EM-4-FMPD_NO_ACTION: No action configured for applet [chars]

Explanation No action has been configured for the specified applet.

Recommended Action Configure at least one action for this applet.

Error Message %HA_EM-4-FMPD_NO_EVENT: No event configured for applet [chars]

Explanation No event has been configured for the specified applet.

Recommended Action Configure an event for this applet.

Error Message %HA_EM-4-FMPD_NOTAGNAME: %s: No tag %s found corresponding to this
event publish.

Explanation The Embedded Event Manager policy director could not associate the tag name with a published event.

Recommended Action In the **action info type event reqinfo** command, use only tag names that correspond to the published event.

 $Error\ Message\ %HA_EM-4-FMPD_NO_TRACK:$ Use of the "track" keyword in the correlate statement is not supported in this image. All tracked objects will return the "unset" state of 0

Explanation The Embedded Event Manager Track ED is not supported in this image.

Recommended Action If you require Embedded Event Manager Track ED, upgrade to an image that supports the feature.

HA EM-6

Error Message %HA_EM-6-FMPD_CONTEXT_RETRIEVE: Failed to retrieve context for key
%s: %s

Explanation Failed to context retrieve variable information for event.

Recommended Action Ensure context information with the given key is saved. If the message continues to occur, copy the message exactly as it appears, and report it your technical support representative.

Error Message %HA_EM-6-FMPD_CONTEXT_SAVE: Failed to save variable context for key
%s: %s

Explanation Failed to context save variable information for event.

Recommended Action Ensure context information with the same key is not already saved. If the message continues to occur, copy the message exactly as it appears, and report it your technical support representative.

Error Message %HA_EM-6-FMPD_DIVIDE_ZERO: Invalid operand in arithmetic division,
cannot divide by zero

Explanation Arithmetic division does not allow divide by zero.

Recommended Action Ensure denominator provided to division action is non-zero.

Error Message %HA_EM-6-FMPD_EEM_CONFIG: Embedded Event Manager configuration: %s

Explanation The Embedded Event Manager (EEM) reports an error in the Event Manager (EM) configuration.

Recommended Action Check the EEM applet or policy configuration

Error Message %HA_EM-6-FMPD_OPERAND_INVALID: Invalid operand in action, expected
value within range %ld to %ld, received: %s

Explanation Arithmetic actions only accept valid long integer values.

Recommended Action Ensure value provided to action is long integer.

Error Message %HA_EM-6-FMPD_POLICY_CHANGED: [chars]: registered policy [chars]
changed by the last installation update

Explanation A registered policy was changed by the last installation update. If the update used the start option, the old policy was automatically unregistered and the new policy registered. Otherwise, the old policy would remain registered and functional until the user unregisters it manually.

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

Error Message %HA_EM-6-FMPD_POLICY_DELETED: [chars]: registered policy [chars]
deleted by the last installation update

Explanation A registered policy was deleted by the last installation update. If the update used the start option, the policy was automatically unregistered. Otherwise, the policy would remain registered and functional until the user unregisters it manually.

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

 $\label{lem:condition} \textbf{Error Message} \ \, \text{\%HA_EM-6-FMPD_POLICY_UNREGREG_SUCC: [chars]: policy [chars] replaced successfully}$

Explanation A registered policy changed by the last installation update was detected. Because the update used the start option, the old policy was automatically replaced by the new policy. This message signaled a successful replacement of the policy.

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

Error Message %HA_EM-6-FMPD_POLICY_UNREG_SUCC: [chars]: policy [chars] unregistered
successfully

Explanation A registered policy changed or deleted by the last installation update was detected. Because the update used the start option, the old policy was automatically unregistered. This message signaled a successful unregistration.

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

Error Message %HA_EM-6-FMPD_REGCOMP: Error compiling regular expression: %s

Explanation An error was encountered when compiling the given regular expression.

Recommended Action Check syntax of regular expression pattern. If the message continues to occur, copy the message exactly as it appears, and report it your technical support representative.

Error Message %HA_EM-6-FMPD_SWITCH_HARDWARE: %s: Policy has requested a hardware switchover

Explanation An Embedded Event Manager policy requested that a hardware switchover occur.

Recommended Action No action is required.

Error Message %HA_EM-6-FMPD_UPDATE_POLICY_COPY: Policy update has copied %d bytes
from %s to %s

Explanation As a result of an event manager update command, an Embedded Event Manager (EEM) policy has been copied.

Recommended Action No action is required.

Explanation As a result of an event manager update command, an EEM policy has been successfully reregistered.

Recommended Action No action is required.

Explanation As a result of an event manager update command, an EEM policy could not be registered.

Recommended Action No action is required.

Error Message %HA_EM-6-FMPD_UPDATE_POLICY_UNREGISTER_FAIL: Policy update has failed
to unregister policy %s %s

Explanation As a result of an event manager update command, an EEM policy could not be unregistered.

Recommended Action No action is required.

Error Message %HA_EM-6-FMS_MODIFY_POLICY: %s: unable to modify the policy to class
%s: scheduling rule unavailable.

Explanation There is no scheduler rule configured to service this event class.

Recommended Action Please configure a scheduler rule before modifying the event.

Error Message %HA_EM-6-FMS_SWITCH_HARDWARE: [chars]: Policy has requested a
hardware switchover

Explanation An Embedded Event Manager policy requested that a hardware switchover occur.

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

HA EM-7

Error Message %HA_EM-7-ACTION_ADD_PARSER: [chars]: Unable to add action [chars]
command;

Explanation Failed to add the specified action 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %HA_EM-7-ACTION_CNS_AGENT_UNAVAIL: [chars]: CNS Event Agent not
available: [dec]

Explanation The CNS Event Agent is currently not available.

Error Message %HA_EM-7-ACTION_CNS_CLEAR_RESTART: [chars]: Unable to clear restart
callback;

Explanation The CNS action process failed to clear restart callback.

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

Error Message %HA_EM-7-ACTION_CNS_SET_RESTART: [chars]: Unable to set restart
callback;

Explanation The CNS action process failed to set restart callback.

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

Error Message %HA_EM-7-ACTION_ENQUEUE_FAIL: [chars]: Unable to enqueue [chars];

Explanation The enqueueing function reported an error.

Error Message %HA_EM-7-ACTION_WB_CREATE: [chars]: create_watched_boolean failed:
[chars]

Explanation The create_watched_boolean function reported an error trying to create the watched boolean.

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

Error Message %HA_EM-7-ACTION_WB_DELETE: [chars]: delete_watched_boolean failed:
[chars]

Explanation The delete_watched_boolean function reported an error trying to delete the watched boolean.

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

```
Error Message %HA_EM-7-FMC_CB_DM_THREADPOOL_CREATE: [chars]:
dispatch_manager_threadpool_create failed [chars]
```

Explanation The dispatch manager reported an error trying to create a thread pool.

```
Error Message %HA_EM-7-FMC_CB_DM_THREADPOOL_START: [chars]:
dispatch manager threadpool start failed [chars]
```

Explanation The dispatch manager reported an error trying to start a thread pool.

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

```
Error Message %HA_EM-7-FMC_ENQUEUE_FAIL: [chars]: Unable to enqueue [chars];
```

Explanation The enqueueing function reported 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.

 $\label{limits} \textbf{Error Message} \ \, \text{\ensuremath{\$HA_EM-7-FMC_INV_REPLY: [chars]: Application client library unable to handle message receive.}$

Explanation The API received a message reply when it was not in a state to accept such messages.

Error Message %HA EM-7-FMC MALLOC: [chars]: Unable to allocate [chars];

Explanation The malloc function reported 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.

 $\label{lem:continuous} \textbf{Error Message $$\$$HA_EM-7-FMC_REG_CBH_PULSE: $$s: Unable to locate reg callback entry for pulse code $$d$$

Explanation The registration callback handler was unable to validate the pulse code received.

Recommended Action The pthread_create function reported an error.

 $Error\ Message\ %HA_EM-7-FMC_REG_CBH_SEND: %s: Unable to send response for FH_MSG_CALLBACK_DONE %s$

Explanation The registration callback handler was unable to send the FH_MSG_CALLBACK_DONE message to the Embedded Event Manager Server.

Recommended Action The pthread_create function reported an error.

Error Message %HA_EM-7-FMFD_ADD_PARSER: [chars]: Unable to add [chars] event detector command;

Explanation The event detector failed to add a command.

Error Message %HA_EM-7-FMPD_CHKPT_ITERATE_END: [chars]: call to chkpt_iterate_end
returned unexpected failure.

Explanation An attempt to register an application with the checkpointing server 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %HA_EM-7-FMPD_CHKPT_NULL_PTR: [chars]: Got a null [chars] but non-null value was expected

Explanation An attempt to do further processing has failed because a null value was received when a non-null value was expected.

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

Error Message %HA_EM-7-FMPD_CHKPT_TBL_ADD: [chars]: could not save a record into a
checkpointing table: [chars]

Explanation An attempt to save a record into the specified checkpointing table has failed.

Error Message %HA_EM-7-FMPD_CHKPT_TBL_REMOVE: [chars]: could not delete a record from a checkpointing table: [chars]

Explanation An attempt to delete a record from the specified checkpointing table 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %HA_EM-7-FMPD_CHKPT_TBL_RESET: [chars]: could not reset a record in a
checkpointing table: [chars]

Explanation An attempt to reset a record in the specified checkpointing table 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %HA_EM-7-FMFD_COND_WAIT: [chars]: conditional wait error: [chars]

Explanation Internal error. The event detector has failed to perform a conditional wait.

Error Message %HA_EM-7-FMPD_COUNTER_SET: [chars]: failed to set a counter: [chars]

Explanation An attempt to set an Embedded Event Manager counter has failed.

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

Error Message %HA EM-7-FMFD DE FETCH: %s: %s[%d]

Explanation Internal error. The event detector has failed to fetch a data element from the statistics data 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %HA_EM-7-FMFD_DM_CREATE: [chars]: could not create dispatch manager:
[chars]

Explanation The event detector has failed to create a dispatch manager.

Error Message %HA EM-7-FMFD ENQUEUE FAIL: [chars]: Unable to enqueue [chars];

Explanation The enqueueing function reported 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 %HA_EM-7-FMPD_EVENT_CREATE: [chars]: failed to create an event:
[chars]

Explanation An attempt to create an Embedded Event Manager event 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %HA_EM-7-FMPD_EVENT_REG: [chars]: failed to register an event:
[chars]

Explanation An attempt to register an Embedded Event Manager event has failed.

Error Message %HA EM-7-FMPD EVENT TYPE: [chars]: unknown event type [dec]

Explanation An unknown Embedded Event Manager event 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %HA_EM-7-FMPD_FILE_OPEN: [chars]: failed to open file [chars] :
[chars]

Explanation An attempt to open the specified file has failed 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 %HA_EM-7-FMPD_FORMAT_TIME: [chars]: error attemting to format time
string

Explanation An attempt to format a time string has failed.

Error Message %HA_EM-7-FMPD_GET_NODE_NAME: [chars]: failed to get the local node name: [chars]

Explanation An attempt to get the local node name 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %HA_EM-7-FMFD_HIST_QERR: %s

Explanation Internal error. The event detector has failed to get a free history list entry.

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

Error Message %HA EM-7-FMFD INV COMPARE OP: %s: invalid comparison operator: %d

Explanation Internal error. The value comparison operator is invalid or not supported.

Error Message %HA_EM-7-FMFD_INV_STATS_TYPE: %s: invalid statistics value type: %d

Explanation Internal error. The statistics data type is invalid 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %HA_EM-7-FMFD_INV_TM: %s: invalid timer: type=%d, timer=%p

Explanation Internal error. The timer value is invalid or not as expected.

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

Error Message %HA_EM-7-FMFD_INV_TM_TYPE: %s: invalid timer type: %d

Explanation Internal error. The timer type is invalid or not supported.

Error Message %HA_EM-7-FMPD_LAST_POLICY: [chars]: invalid last policy name replied
[chars]

Explanation There has been an internal error. The last policy name that the script director replied to the **show event manager policy registered** command is an invalid policy name.

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

Error Message %HA EM-7-FMPD LONG PATHNAME: [chars]: too long path name

Explanation There has been an internal error. A path name could not be formed because it exceeded the maximum length.

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

Error Message %HA EM-7-FMFD MALLOC: [chars]: Unable to allocate [chars]; [chars]

Explanation The malloc function reported an error.

Error Message %HA EM-7-FMFD MET RBLD: %s: %s

Explanation Internal error. The event detector has failed to rebuild the metric list from the checkpointed records.

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

Error Message %HA_EM-7-FMFD_MSGSEND_RETRY_ERR: %s: %d

Explanation The event detector has exceeded its maximum number of retries to send a pulse to the embedded event manager to notify of an event publish.

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

Error Message %HA_EM-7-FMFD_NO_CLOCK: [chars]: unable to read clock using clock gettime: [chars]

Explanation The clock reading function reported an error.

Error Message %HA_EM-7-FMPD_NO_MEM: [chars]: not enough memory: [chars]

Explanation Memory allocation failed due to 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 %HA_EM-7-FMFD_OE_CREATE: %s: could not create an occurrence entry

Explanation Internal error. The event detector has failed to create an entry for the matched occurrence list.

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

Error Message %HA EM-7-FMFD OE REMOVE: %s: could not remove an occurrence entry

Explanation Internal error. The event detector has failed to remove an entry for the matched occurrence list.

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

Error Message %HA_EM-7-FMFD_OID_UNAVAIL: [chars]: The following oid has become
unavailable: [chars]

Explanation An internal error has occurred. The registered OID is no longer available in the system.

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

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

Error Message %HA_EM-7-FMFD_OPEN_CONF: [chars]: could not open event detector
config file: [chars]

Explanation The event detector has failed to open the configuration file for event detector 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 %HA_EM-7-FMPD_OVL_SETUP_ENV: [chars]: could not update environment variables: [chars]

Explanation Updating environment variables of the process according to stored system variables 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 that you have gathered. Attach the following information to 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 error. The event detector has failed to allocate memory for the event publish timer block.

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

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

```
Error Message %HA_EM-7-FMFD_READ_CONF: [chars]: could not read event detector
config file: [chars]
```

Explanation The event detector has failed to read the configuration file for event detector 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 %HA_EM-7-FMFD_RESOURCE_MONITOR_REGISTER_FAIL: %s:
resource_monitor_register failed; return code = %d
```

Explanation The resource_monitor_register function reported an error trying to register for RMI notifications.

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

```
Error Message %HA EM-7-FMFD SNMP ADDR ILLEGAL: %s: Illegal SNMP address type
```

Explanation The SNMP address is illegal.

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

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

Error Message %HA_EM-7-FMFD_SNMP_ADDR_IPV6: %s: SNMP IPV6 address is not supported

Explanation The IPV6 address is 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %HA EM-7-FMFD SNMP BUILD PDU FAILED: %s: SNMP build pdu failed

Explanation The SNMP pdu build 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %HA_EM-7-FMFD_SNMP_COMM_FAIL: %s: Unable to create SNMP octet
community string; string = %s

Explanation The community string was not able to build into a SNMP octet string

Error Message %HA EM-7-FMFD SNMP ERRCODE: %s: %s

Explanation The SNMP error code.

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

Error Message %HA_EM-7-FMFD_SNMP_MAKE_PDU_FAILED: %s: SNMP make pdu failed

Explanation The SNMP pdu make 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %HA_EM-7-FMFD_SNMP_MSG_FAIL: %s: Unable to create a SNMP message; community = %s

Explanation The SNMP message failed to be created

Error Message %HA_EM-7-FMFD_SNMP_OID_INVALID: %s: Invalid SNMP oid length %d

Explanation The SNMP oid has invalid length

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

Error Message %HA_EM-7-FMFD_SNMP_OID_MAKE_FAIL: %s: Unable to build an oid string
into a SNMP oid; oid = %s

Explanation The oid string was not able to build into a SNMP oid

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

Error Message %HA EM-7-FMFD SNMP REQ FAILED: %s: SNMP request failed

Explanation The SNMP request has failed.

Error Message %HA EM-7-FMFD SNMP RESP CANCEL: %s: SNMP response cancelled

Explanation The SNMP response has been cancelled.

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

Error Message %HA_EM-7-FMFD_SNMP_RESP_ERROR: %s: SNMP response error; error_status = %d

Explanation The SNMP response has 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.

Explanation The SNMP proxy got event but the queue is empty.

Error Message %HA_EM-7-FMFD_SNMP_RESP_TIMEOUT: %s: SNMP response has timed out

Explanation The SNMP response has timed out.

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

Error Message %HA_EM-7-FMFD_SNMP_UNKNOWN_TYPE: %s: Unknown SNMP operation or response type %d

Explanation The operation or response type is unknown.

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

Error Message %HA EM-7-FMFD SNMP VARBIND FAIL: %s: Unable to create a SNMP varbind

Explanation The oid failed to make into a SNMP varbind

Error Message %HA_EM-7-FMPD_SWITCH_FAIL: %s: The system is unable to switch to standby processor. Switchover cancelled.

Explanation Switchovers must occur when STANDBY is available and ready.

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

Error Message %HA_EM-7-FMFD_THRD_POOL_CREATE: [chars]: could not create thread
pool: [chars]

Explanation The event detector has failed to create a thread pool.

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

Error Message %HA_EM-7-FMPD_TIMER_ARM: [chars]: failed to arm a timer: [chars]

Explanation An attempt to arm an Embedded Event Manager timer has failed.

Error Message %HA_EM-7-FMFD_TM_LEAF_NEW: %s: could not create a leaf timer

Explanation Internal error. The event detector has failed to create a managed leaf timer.

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

Error Message %HA_EM-7-FMS_ASYNC_ATTACH_CHKPT: [chars]: Failed to attach to handle chkpt asychronous events; [chars]

Explanation The event pulse attach event function reported an error trying to attach the checkpoint pulse handler.

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

Error Message %HA_EM-7-FMS_CHKPT_TBL_UNREG: [chars]: could not unregister the
checkpointed table [chars]: [chars]

Explanation Failed to unregister a checkpointed table.

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

Error Message %HA_EM-7-FMS_FDC_ALLOCATE: %s: Failed to allocate Event Detector
context control block; %s

Explanation The get_fd function reported an error trying to allocate a Event Detector context control block.

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 %HA_EM-7-FMS_FDC_OPEN: [chars]: Failed to open Event Detector context
control block

Explanation The open_fd function reported an error trying to open an Event Detector context control block.

Error Message %HA_EM-7-FMS_GUARD_WORD_VER: %s: %s guard word corrupted; %p

Explanation The guard word for the specified control block does not contain what is expected.

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

Error Message %HA EM-7-FMS INV ARG STRING: %s: Invalid argument string: %s

Explanation An invalid argument string was passed to the specified function.

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

Error Message %HA_EM-7-FMS_MALLOC: %s: Unable to allocate %s; %s

Explanation The malloc function reported an error.

Error Message %HA_EM-7-FMS_NO_CLOCK: [chars]: unable to read clock using clock_gettime: [chars]

Explanation The clock reading function reported 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 %HA_EM-7-FMS_NULL_SCRIPT_NAME: %s: The script name is NULL

Explanation An invalid script name was passed as an argument into the specified function.

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

Error Message %HA EM-7-FMS POLICY EXEC: %s: Policy execution %s

Explanation The Embedded Event Manager policy excution state has been changed to the state named in the message.

Error Message %HA_EM-7-FMS_POLICY_MAX_ENTRIES: [chars]: Maximum number of script
publish entries exceeded; some events have been discarded

Explanation An attempt to publish an event requiring a script failed because there is no more room in the script publish 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 %HA_EM-7-FMS_REALLOC_FAIL: [chars]: Unable to reallocate [chars];
[chars]

Explanation The reallocation function reported 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 %HA_EM-7-FMS_STRDUP: %s: Failed to duplicate string %s; %s

Explanation The strdup function reported an error.

 $Error\ Message\ %HA_EM-7-FMS_SWITCH_FAIL:\ [chars]:\ The\ system\ is\ unable\ to\ switch\ to\ standby\ processor.\ Switchover\ cancelled.$

Explanation Switchovers must occur when a standby processor is available and ready.

Recommended Action Ensure that a standby processor is available and ready.

Error Message %HA_EM-7-FMS_WB_CREATE: [chars]: create_watched_boolean failed;
[chars]

Explanation The create watched boolean function reported an error trying to create the watched boolean.

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

Error Message %HA_EM-7-FMS_WQ_CREATE: [chars]: create_watched_queue failed; [chars]

Explanation The create watched queue function reported an error trying to create the watched 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 %HA_EM-7-PTHREAD_MUTEX_LOCK: [chars]: Error locking mutex [chars];
[chars]

Explanation The pthread mutex lock function reported an error while attempting to lock the specified mutex.

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

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

Error Message %HA_EM-7-PTHREAD_MUTEX_UNLOCK: [chars]: Error unlocking mutex
[chars]; [chars]

Explanation The pthread mutex unlock function reported an error while attempting to unlock the specified mutex.

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

HAL-1

Error Message %HAL-1-UNAVAILABLE: %s

Explanation A HAL Port Adapter was detected which has a revision earlier than rev3. This port adapter pre-dates the router platform it has been installed in, and is not a supported combination.

Recommended Action Upgrade to a HAL Port Adapter which is rev3 or above.

Error Message %HAL-1-UNAVAILABLE: %s could not be disabled by %s

Explanation The shutdown failed to disable the interface.

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

Error Message %HAL-1-UNAVAILABLE: %s could not be enabled by %s

Explanation The restart failed to enable the interface.

Error Message %HAL-1-UNAVAILABLE: %s could not be reset by %s

Explanation The restart failed to reset the interface.

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

Error Message %HAL-1-UNAVAILABLE: %s init failed at %s

Explanation HAL initialization failure.

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

Error Message %HAL-1-UNAVAILABLE: Failed to configure %d interfaces in bay %d,
shutting down bay

Explanation The HAL hardware failed. Some components on the board failed to initialize.

Recommended Action Replace the HAL port adapter.

Error Message %HAL-1-UNAVAILABLE: Found %d interfaces in bay %d, shutting down bay

Explanation The HAL hardware failed. Some components on the board failed to initialize.

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

Error Message %HAL-1-UNAVAILABLE: Microcode to slot %d

Explanation Failed to download firmware into the HAL port adapter.

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

Error Message %HAL-1-UNAVAILABLE: Slot %d firmware init (%s)

Explanation HAL firmware initialization failure.

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

Error Message %HAL-1-UNAVAILABLE: Slot %d for microcode download

Explanation An error was detected on the communication path between VIP and HAL.

HAL-2

Error Message %HAL-2-UNAVAILABLE: %#08x %08x %08x %08x

Explanation HAL firmware crash information

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

Error Message %HAL-2-UNAVAILABLE: %s: packet received for unknown VC %d

Explanation The virtual channel encapsulation is corrupted.

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

Error Message %HAL-2-UNAVAILABLE: HAL F/W crashed in bay %d: %#x - reset

Explanation HAL firmware does not update the software watchdog.

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

HAL-3

Recommended Action support representative.

Error Message %HAL-3-UNAVAILABLE: %s - Accumulator is not available

Explanation An invalid TX accumulator is detected.

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

Error Message %HAL-3-UNAVAILABLE: %s

Explanation General error information.

Error Message %HAL-3-UNAVAILABLE: %s packet buffer, pak=0x%x

Explanation A software or hardware error occurred. The HAL 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 %HAL-3-UNAVAILABLE: %s: failed to send %s love letter

Explanation A love letter was not sent to RSP.

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

 $\textbf{Error Message} \ \text{\$HAL-3-UNAVAILABLE:} \ \textbf{Failed to receive reply \$d from bay \$d firmware } \\$

Explanation A message was not received from HAL firmware.

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

Error Message %HAL-3-UNAVAILABLE: Failed to send msg %d to %s driver firmware

Explanation A port related message was not sent to HAL firmware.

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

Error Message %HAL-3-UNAVAILABLE: Failed to send msg %d to bay %d firmware

Explanation A message was not sent to HAL firmware.

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

Error Message %HAL-3-UNAVAILABLE: Failed to send msg %s to bay %d firmware

Explanation Specified message was not sent to HAL firmware.

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

Error Message %HAL-3-UNAVAILABLE: Received unexpected mailbox message (id = %d)

Explanation Unexpected message from HAL firmware.

Error Message %HAL-3-UNAVAILABLE: Slot %d device ID seen as %#x, expected %#x (Mueslix)

Explanation Failed to detect the hdlc controller on the HAL.

Recommended Action Replace the HAL port adaptor.

Error Message %HAL-3-UNAVAILABLE: Slot %d device ID seen as %#x, expected %#x (PLX9060)

 $\textbf{Explanation} \quad \text{The PLX 9060 was not detected on the HAL}.$

Recommended Action Replace the HAL port adaptor.

HA_EM Messages