HEALTH_MONITOR Messages

Error Message

`%HEALTH_MONITOR-2-HM_RELOAD: Health Monitor is forcing a reload due to : [chars]`

Explanation Health Monitor is causing a reload in order to recover from a fatal situation.

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

Error Message

`%HEALTH_MONITOR-2-INIT_FAILURE: Init failure: [chars]`

Explanation A problem occurred in the health monitor during initialization.

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

Error Message

`%HEALTH_MONITOR-2-NO_FREE_EVENT_BUFFERS: Event pool depleted: [chars]`

Explanation The event pool has been depleted. There are no free buffers to process events.

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

Error Message

%HEALTH_MONITOR-3-INVALID_ACTION: Invalid action

Explanation The health monitor detected an invalid action.

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

Error Message

%HEALTH_MONITOR-3-INVALID_ARG_NUM: Invalid argument number [[dec]], arg num list [chars]=

Explanation An invalid argument number was passed during this event.

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

Error Message

%HEALTH_MONITOR-3-INVALID_CONDITION: Invalid [chars] condition

Explanation The condition specified in the message is not valid and is ignored.

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

Error Message

%HEALTH_MONITOR-3-INVALID_PARAMETERS: A call to Health Monitor [chars] made with
invalid parameters

Explanation A call to the health monitor contains one or more invalid parameters.

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

Error Message

%HEALTH_MONITOR-3-INVALID_SEVERITY: Invalid event severity [hex]

Explanation The health monitor received an event that contained an invalid event severity. The event was not processed.

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

Error Message

%HEALTH_MONITOR-3-NO_FREE_RULE_IDS: No more Rule IDs available

Explanation No more rule IDs can be allocated. The effect of this state is that health monitor rules can no longer be created.

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

Error Message

```
%HEALTH_MONITOR-3-NULL_ACTION_ROUTINE: NULL action routine invoked
```

Explanation The health monitor attempted to invoke an action that has a null value.

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

Error Message

```
%HEALTH_MONITOR-3-PRE_INIT_CALL: Health Monitor routine called prior to
initialisation
```

Explanation The health monitor component was called before initialization. This error could result in the loss of vital information.

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

Error Message

```
%HEALTH_MONITOR-3-VARIABLE_CREATE_FAILED: [chars] variable ([chars]) creation
failed: [chars]
```

Explanation The request to create a variable in the variable database has failed.

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

Error Message

`%HEALTH_MONITOR-3-VARIABLE_DBASE_CREATE_FAILED: Variable database create failed`

Explanation The system failed to create the linked list used as the variable database. No variables can be created.

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

Error Message

`%HEALTH_MONITOR-3-VARIABLE_DELETE_FAILED: [chars] variable ([chars]) deletion failed: [chars]`

Explanation The request to delete a variable from the variable database has failed.

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

Error Message

`%HEALTH_MONITOR-3-VARIABLE_READ_FAILED: Variable ([chars]) read failed: [chars]`

Explanation The request to read from a variable in the variable database has failed.

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

Error Message

```
%HEALTH_MONITOR-3-VARIABLE_WRITE_FAILED: Variable ([chars]) write failed: [chars]
```

Explanation The request to write to a variable in the variable database has failed.

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

Error Message

```
%HEALTH_MONITOR-3-VAR_RULE_LIST_CREATE_FAILED: Variable ([chars]) rule list
create failed
```

Explanation The health monitor could not create a rule list to be associated with a variable in the variable database.

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

Error Message

```
%HEALTH_MONITOR-3-VAR_RULE_LIST_INSERT_FAILED: Variable ([chars]) rule list
insert failed
```

Explanation The HM could not insert a rule into the rule list associated with a variable in the variable database.

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

Error Message

```
%HEALTH_MONITOR-3-VAR_RULE_LIST_NOT_FOUND: Variable ([chars]) rule list not found
```

Explanation The rule list associated with a variable in the variable database cannot be found.

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

HEARTBEAT Messages

Error Message

```
%HEARTBEAT-2-NOT_RUNNING: Heartbeat messages have not been sent for [dec] seconds
[[chars] [dec]%/[dec]%] [[chars] [time-stamp]] [[chars] [time-stamp]] [[chars]
[time-stamp]]
```

Explanation Heartbeats have not been sent for a significant amount of time. It is likely that a timeout will occur soon and will cause the system to be reset.

Recommended Action No action is required.

Error Message

```
%HEARTBEAT-3-PEER_FAILED: Heartbeat peer process has failed to receive heartbeats,
resetting [[hex]]
```

Explanation Heartbeats have failed on the peer process, and the system is no longer operational.

Recommended Action No action is required.

Error Message

```
%HEARTBEAT-3-TIMED_OUT: Heartbeat messages have failed, resetting [chars] [[hex]]
```

Explanation Heartbeats have failed and the system is no longer operational.

Recommended Action No action is required.

Error Message

```
%HEARTBEAT-6-NOT_HEARD: Heartbeat messages have not been heard for [dec] seconds
[[hex]]
```

Explanation Heartbeats have not been heard for a significant amount of time. It is likely that a timeout will occur soon and will cause the system to be reset.

Recommended Action No action is required.

HFE_HAL Messages

Error Message

```
%HFE_HAL-3-ADJHWAPI_ADJ: [chars]
```

Explanation An internal hwapi s/w error. Getting Null platform space for XDR unpacking

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HFE_HAL-3-ADJHWAPI_CEF: [chars]
```

Explanation An internal HWAPI software error. A NULL platform space has been encountered.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HFE_HAL-3-ADJHWAPI_OCE: [chars]
```

Explanation An internal HWAPI software error. Getting NULL oce_base from the handle.

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

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

Error Message

`%HFE_HAL-3-ADJ_INT: HFE_HAL internal error number of Adj's created: [int], number of Adj's deleted: [int]`

Explanation   An internal HFE_HAL s/w error. More Adjacency deletes than creates

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%HFE_HAL-3-ILLEGALARGS: [chars]`

Explanation   An internal software error has occurred.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%HFE_HAL-3-ILLEGAL_OBJ_TYPE: [chars] [chars]`

Explanation   An internal software error has occurred.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%HFE_HAL-3-INCONSISTENCY_ERROR: [chars]

Explanation Inconsistency between software and hardware occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%HFE_HAL-3-WRONG_ARG1: [chars] [hex]

Explanation An internal software error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%HFE_HAL-3-WRONG_ARG2: [chars] [chars] [hex]

Explanation An internal software error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

HHM Messages

Error Message

%HHM-1-PROCFAIL: [chars]

> **Explanation**   During system initialization, the system was unable to create the periodic check process for the Cisco AS5400 health monitor because of a low-memory condition. The router memory has been exhausted or the memory may be fragmented. This condition may be caused by the current system configuration, the network environment, or a software error.

> **Recommended Action**   Check the minimum memory requirements for your system configuration. If a memory problem is suspected, reduce other activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.If your system meets the minimum memory requirements, this message is most likely caused by a software failure. If the problem persists, copy the error message text exactly as it appears on the console or in the system log. Enter the show tech-support, show log, show process memory and show memory summary commands. Open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

%HHM-3-INTFWEDGE: [chars] [chars]

> **Explanation**   The interface hold queues have reached their limit and are stuck. Packets cannot be transmitted in or out of this interface.

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

HIFN79XX Messages

Error Message

```
%HIFN79XX-1-ALIGN: Alignment failure on packet buffer: [hex]
```

Explanation A software error has occurred. The Hifn 79xx driver has detected that the buffer is not correctly aligned.

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

Error Message

```
%HIFN79XX-1-ERROR: [chars]
```

Explanation An error has occurred in the Hifn79xx driver.

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

Error Message

```
%HIFN79XX-1-HIFN79XX_PROC_ALIGN: Hifn 79XX Command Processor alignment error:
([chars]=[hex])
```

Explanation A Hifn 79xx driver command processor alignment error has occurred.

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

Error Message

```
%HIFN79XX-1-HIFN79XX_PROC_INIT: Hifn 79XX Command Processor initialization
failed: ([chars])
```

Explanation The Hifn 79xx driver command processor initialization has failed.

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

Error Message

%HIFN79XX-1-INITFAIL: [chars]

> **Explanation** The Hifn 79xx driver failed to initialize at the point specified in the error message.

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

Error Message

%HIFN79XX-1-NOMEMORY: [chars] creation failed

> **Explanation** The Hifn 79xx driver could not allocate memory for the specified data structure.

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

Error Message

%HIFN79XX-1-OWNER: [chars] packet buffer, pak=[hex]

> **Explanation** A software or hardware error has occurred. The Hifn 79xx driver detected that the buffer ring is in an inconsistent and unrecoverable state.

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

Error Message

%HIFN79XX-1-PKTENGREQCOUNT_ERROR: Hifn79xx PktEngReqCount = [dec] is not valid.

> **Explanation** The Hifn79xx packet-engine request for a count-range is from zero to four. The value specified in the error message is out of the range of zero to four.

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

Error Message

%HIFN79XX-1-PKTENGREQCOUNT_ERROR1: Hifn79xx PktEngReqCount = [dec] is not valid.

> **Explanation** The Hifn79xx packet engine request count should be less than four. The value specified in the error message is invalid.

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

Error Message

```
%HIFN79XX-1-PKTENGRESULT_ERROR: Hifn79xx PktEngEntry-Result.destinationCount =
[hex] and the result_len [hex] don't match
```

Explanation The Hifn79xx packet engine failed during a length-check operation.

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

Error Message

```
%HIFN79XX-1-PKTENGRET_ERROR: Hifn79xx PktEng Return Value = [hex], [chars].
```

Explanation This message provides a Hifn79xx packet-engine return-code.

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

Error Message

```
%HIFN79XX-1-TOOBIG: [chars] received a packet with size [dec].
```

Explanation The Hifn79xx driver has received a packet that exceeds the MTU.

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

Error Message

```
%HIFN79XX-1-TOOLKIT_ERROR: hifn79xxUnitId = [dec], exceptionInformation = [dec].
```

Explanation The Hifn79xx toolkit has reported an unexpected internal error.

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

Recommended Action The following are hex modem network module asynchronous driver messages.

Error Message

```
%HIFN79XX-3-CMD_ERR: Hifn 79XX command returned error: ([hex])
```

Explanation The Hifn 79xx driver has returned an error code while processing a command.

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

Error Message

`%HIFN79XX-3-HIFN79XX_PROC_ERR: Hifn 79XX Command Processor error: ([chars])`

Explanation A Hifn 79xx command processor error has occurred.

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

Error Message

`%HIFN79XX-3-NVRAMFAIL: Hifn 79XX could not read its own NVRAM configuration: ([dec])`

Explanation A Hifn 79xx driver NVRAM error has occurred.

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

Error Message

`%HIFN79XX-6-SHUTDOWN: [chars] shutting down`

Explanation The specified Hifn 79xx driver is shutting down. It may have been physically removed.

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

HLFM Messages

Error Message

`%HLFM-3-MACFREE_ERROR: MAC address [enet], vlad [dec] is still referenced; cannot free`

Explanation An attempt was made to free a MAC address before all references to it had been released.

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

Error Message

```
%HLFM-3-MAP_ERROR: IP address [IP_address] not in mac tables, mac-address [enet],
vlan [dec]
```

Explanation IP address and MAC address tables have lost their synchronization.

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

Error Message

```
%HLFM-3-MOD_SD: Failed to modify Station Descriptor with index [dec], vlan [dec],
di [dec], error [dec], mad [dec], ref-count [dec]
```

Explanation The forwarding manager is attempting to modify a station descriptor that is no longer in use or is invalid.

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

Error Message

```
%HLFM-3-SEND_FAIL: Failed to send RPC message, req %d, %s
```

Explanation Local resource error or too many outgoing messages queued up for msg class

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HLFM-6-ADDR_SYNC: The system is retrying to sync the MAC addresses: reason %d
```

Explanation The system was unable to sync the MAC addresses and is trying again

Recommended Action No action is required.

Error Message

```
%HLPIP-4-NOVMR: Failed to generate VMRs for host on %s
```

Explanation The ACL Manager could not allocate the data structures needed to describe an ACL in a form that can be loaded into hardware. Probably caused by lack of available memory.

Recommended Action Use a less complicated configuration that requires less memory.

Error Message

```
%HMAN--CONSOLE_SETUP_FAILED: Failed to setup console service. It should beenabled
on %s
```

Explanation A recoverable error has been encountered.

Recommended Action UNAVAILABLE

Error Message

```
%HMAN--HOSTNAME_SET_FAILED: Failed to set hostname: %s
```

Explanation The host manager received notification that thesystem hostname has been set. The host managerfailed to pass this value to the ASR kernel.

Recommended Action UNAVAILABLE

Error Message

```
%HMAN--INITIALIZATION_FAILED: Host Manager initialization failed.
```

Explanation A problem was encountered during initialization.Reasons could vary.

Recommended Action UNAVAILABLE

HMM_ASYNC Messages

Error Message

```
%HMM_ASYNC-3-CARD_FAILED_DOWNLOAD: Unable to download firmware image to digital
modem card in slot %d.
```

Explanation Failed to bring up the processor on the digital modem card.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HMM_ASYNC-3-HMM_HARDWARE_EXCEPTION: HMM  : Digital Modem Card %d hardware
exception  : %s
```

Explanation This may be an intermittent or permanent hardware failure.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HMM_ASYNC-3-MODEM_FAILED_DIAGS: Digital modem %d/%d on Simm %d failed power on
diagnostics.
```

Explanation Digital modem failed to pass power on diagnostics. It will not be used.

Recommended Action If remaining Simm(s) passed diagnostics, remove or replace this problem Simm before continuing. Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

```
%HMM_ASYNC-3-MODEM_MAILBOX_IS_FULL: HMM Modem %d/%d Mailbox is Full, command %#x
not sent.
```

Explanation Error delivering commands to Modem Module. This may be a transient failure. If this message repeats every 30 seconds it may indicate a failed Modem Module.

Recommended Action If the error 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HMM_ASYNC-3-MODEM_STOPPED_PROCESSING_MAIL: HMM Modem [dec]/[dec] failed to
accept a new command.
```

Explanation The modem has failed to accept a new command. This may be a temporary failure or the modem may remain unusable until the system is reset.

Recommended Action Reset the modem by issuing the **clear modem** slot/port command, with slot being the slot number of the modem, and port being the port number.

Error Message

```
%HMM_ASYNC-3-NOMEMORY: No memory for %s of unit %d
```

Explanation The router does not have enough memory to perform the function

Recommended Action Consider adding more shared memory. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HMM_ASYNC-3-NORAWRXPOOL: Unable to create pool for %d raw Rx mode buffers
```

Explanation The router does not have enough I/O memory for buffers

Recommended Action Consider adding more shared memory. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

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

Error Message

%HMM_ASYNC-3-NORAWTXPOOL: Unable to creaet pool %d raw Tx mode buffers

Explanation The router does not have enough I/O memory for buffers

Recommended Action Consider adding more shared memory. Copy the message exactly as it appears
on the console or in the system log. Research and attempt to resolve the issue using the tools and
utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages,
these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

%HMM_ASYNC-3-NOTTYCREATE: Unable to create TTY structure for line %d

Explanation Unable to create tty line control block for the specified line This may be due to not
having enough memory in the router

Recommended Action Consider adding more shared memory. Copy the message exactly as it appears
on the console or in the system log. Research and attempt to resolve the issue using the tools and
utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages,
these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

%HMM_ASYNC-3-SIMM_FAILED_DOWNLOAD: Unable to download modem firmware image to Simm
%d in slot %d.

Explanation Failed to load modem firmware into the Simm.

Recommended Action If firmware successfully loaded into remaining Simm(s), remove or replace this
problem Simm before continuing. Copy the message exactly as it appears on the console or in the
system log. Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

%HMM_ASYNC-3-SIMM_RUNTIME_ERROR: Simm %d in slot %d has halted due to a Runtime
Error.

Explanation The Portware running on the Simm was halted due a runtime error. The six modems contained on the Simm have been marked Bad and are no longer usable until the system is reloaded.

Recommended Action Copy the error message exactly as it appears, along with show modem and show modem log output, and report it to your technical support representative.

Error Message

%HMM_ASYNC-3-TDM_SYNTHESIS_ERROR: HMM Digital Modem Card %d experienced a TDM
Synthesis Error.

Explanation Digital Modem Card failed to send or receive PCM data in time to avoid data loss. This may cause the modems to speed shift, retrain, or hangup.

Recommended Action Verify that the DS1 interface(s) share a common clock source. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%HMM_ASYNC-3-UNKNOWNPLATFORM: Unknown Platform type to support HMM Network Module

Explanation The Network Module is not compatible with the current platform that it is plugged into.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%HMM_ASYNC-3-UNKNOWN_MESSAGE: Received unknown message 0x%x at mail offset %d from modem %d/%d.`

Explanation Received unidentifed message from modem. This is symtomatic of running with an incompatible version of modem firmware.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%HMM_ASYNC-4-NO_MODEMS_PRESENT: HMM Digital Modem Card %d contains no active modems.`

Explanation There are no modems installed on the network module.

Recommended Action Make sure the network module contains properly installed MICA-6DM Simm(s).

HOOD Messages

Error Message

`%HOOD-3-BADUNIT: msgtxt_badunit`

Explanation An internal software error occurred.

Recommended Action If the message recurs, call your technical support representative for assistance.

Error Message

`%HOOD-5-CABLEERR: Unit %d, HP100VG, cable error. Training failed`

Explanation A 100VG cable or hub is faulty.

Recommended Action If the message recurs, and either the cable or hub appears to be good, repair or replace the router module.

Error Message

`%HOOD-5-COLL: Unit %d, excessive collisions`

Explanation An Ethernet cable is broken or unterminated, or the transceiver is unplugged.

Recommended Action If the transceiver appears to be properly terminated, repair or replace the router.

Error Message

`%HOOD-5-LOSTCARR: Unit %d, lost carrier. Transceiver problem?`

Explanation An Ethernet transceiver is unplugged or faulty.

Recommended Action Repair or replace the controller.

Error Message

`%HOOD-5-NOCABLE: Unit %d, HP100VG, no tone detected. Check cable, hub`

Explanation A 100VG cable is faulty.

Recommended Action If the message recurs, and either the cable or hub appears to be good, repair or replace the router module.

HOST_ADJ Messages

Error Message

`%HOST_ADJ-3-ADJGENDEALLOCATEFAIL: Failed to deallocate memory %s`

Explanation An internal software error occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%HOST_ADJ-3-ILINITFAIL: Failed to initialise host adjacency subblock`

Explanation An internal software error occurred.

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

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

HP100VG Messages

Error Message

```
%HP100VG-1-ACCESS: %s access to network denied
```

Explanation Access to the network is denied because of incompatible configuration.

Recommended Action Check the configuration of the hub for Frame Format, Promiscuous, and Repeater bit to indicate proper configuration.

Error Message

```
%HP100VG-1-DISCOVER: Only found %d interfaces on bay %d, shutting down bay
```

Explanation No VG interface detected.

Recommended Action Make sure 100VG PA is properly seated in the slot. Otherwise repair or replace the 100VG PA interface module

Error Message

```
%HP100VG-1-DUPMAC: On %s LAN segment
```

Explanation Two VG devices on the same LAN segment have the same MAC address.

Recommended Action Check router configuration to make sure that no duplicate MAC address is configured.

Error Message

```
%HP100VG-1-LANCNF: %s configuration not compatible with the network
```

Explanation Configuration of the router module is not compatible to the network

Recommended Action Check the configuration of the hub for Frame Format, Promiscuous, and Repeater bit to indicate proper configuration

Error Message

```
%HP100VG-1-TRAINFAIL: %s unable to login to the hub
```

Explanation Unable to login to the hub.

Recommended Action Take action based on the following error messages.

Error Message

%HP100VG-3-NOCAM: %s hardware CAM device not found

Explanation Could not find Hardware CAM on the PA module

Recommended Action Repair or replace the 100VG PA interface module.

Error Message

%HP100VG-3-NOTHP100VG: Bay %d device ID seen as %#x, expected %#x

Explanation Could not find 100VG PCI device

Recommended Action Make sure 100VG PA is properly seated in the slot. Otherwise repair or replace the 100VG PA interface module.

Error Message

%HP100VG-3-OWNERR: %s packet buffer, pak=0x%x

Explanation A software or hardware error occurred. The HP100VG driver detected that the buffer 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

%HP100VG-5-CABLEERR: %s training failed

Explanation An 100VG cable or hub is faulty.

Recommended Action Repair or replace the cable or hub. If the cable or hub appears to be good, repair or replace the VG PA interface module.

Error Message

%HP100VG-5-LOSTCARR: %s cable/hub problem?

Explanation The VG controller detects link to the hub is down due to cable, hub or vg controller problem.

Recommended Action Repair or replace the cable or hub. If either the cable or hub appears to be good, repair or replace the VG PA interface module.

Error Message

%HP100VG-5-NOCABLE: %s cable fault; tone not detected

Explanation An 100VG cable is faulty.

Recommended Action Repair or replace the cable. If either the cable appears to be good, repair or replace the VG PA interface module.

HPI Messages

Error Message

```
%HPI-3-CODEC_NOT_LOADED: channel:[chars] DSP ID:[hex], command failed as codec not
loaded [dec]
```

Explanation   Sending messages to DSP without a loaded codec can result with the DSP failing.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HPI-3-FAILED_START: channel:[chars] DSP ID:[hex], failed mode [dec] for service
[dec]
```

Explanation   Failed to start DSP services.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HPI-3-GSMAMRNB_LICENSE_NOT_ACTIVATED:
********************************************************** GSM AMR-NB License is
not yet activated. Please configure 'license feature gsmamrnb-codec-pack' and
accept the EULA to activate the license.
**********************************************************
```

Explanation   Failed to start DSP services for GSM AMR-NB codec.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HPI-3-INVALID_PAYLOAD: wrong payload size, channel:[chars] DSP ID:[hex], failed
mode [dec] for service [dec]
```

Explanation Failed to start DSP services.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech show log** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information

Error Message

```
%HPI-3-SRTP_EVAL_FREE_ERROR: Error encountered on release SRTP bandwidth and
tunnels reservation
```

Explanation Error encountered on release SRTP bandwidth and tunnels.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech show log** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information

Error Message

```
%HPI-4-INVALID_CODEC_LOAD: channel:[chars] DSP ID:[hex], invalid hpi mode [dec]
for loading codec [dec]
```

Explanation Attempt to load codec when the DSP is in an invalid mode which can result with DSP failure.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HPI-4-INVALID_ECAN_TYPE: [chars] ECAN is not available in voice-card [dec],
[chars] ECAN will be used
```

Explanation All voice cards participated in DSPFarm must have the same echo canceller type

Recommended Action Make sure all voice cards participated in DSPFarm have the same echo canceller type configured

Error Message

```
%HPI-4-NO_CLOSE: channel:[chars] DSP ID:[hex]
```

Explanation Attempt to release DSP without sending close message

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech show log** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HPI-6-SRTP_EVAL_LIMIT: The SRTP bandwidth and tunnels usage exceed the license
limits
```

Explanation The SRTP bandwidth and tunnels exceed the license limits.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech show log** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information

HPSECURE Messages

Error Message

`%HPSECURE-2-HRPC_FAILURE: Switch %u is unable to send a message to the other members of the stack.`

Explanation A stack member cannot communicate with the other members.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%HPSECURE-6-ADDR_REMOVED: Address on port %s cannot be added on switch %u and has been removed.`

Explanation At least one switch in the stack could not add the address due to platform resource failure, so it has been deleted from all switches in the stack.

Recommended Action No action is required.

HQF_MAP_TT Messages

Error Message

`%HQF_MAP_TT-3-HQF: [chars] error detected: [chars] [hex] [hex]`

Explanation A software programming error for the HQF TT NP Mapper was detected.

Recommended Action This software programming error is not considered fatal to the operation of the TT NPs. The software is designed to detect and report the error condition. If this message recurs, reset the affected device. Copy the message exactly as it appears on the console or in the system log. Record the output from the **show tech show lo** 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. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HQF_MAP_TT-3-NOMEM: Memory Allocation Failure - [chars] ([hex])
```

Explanation HQF TT NP Mapper could not allocate required memory needed.

Recommended Action This error might indicate that more memory must be installed in order to service all the features and related entities enabled via the configuration. Try to reload the IOS image. If this message recurs, copy the message exactly as it appears on the console or in the system log. Enter the **show tech show log** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information

Error Message

```
%HQF_MAP_TT-4-HQF_WARN_HQF_OVERSUBSCRIPTION_CLEARED: Over-subscription at the HQF
level on interface [chars] has cleared.
```

Explanation The HQF over-subscription condition on the specified interface has cleared.

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

Error Message

```
%HQF_MAP_TT-4-HQF_WARN_HQF_OVERSUBSCRIPTION_DETECTED: Current configuration has
resulted in an over-subscription condition at the HQF level on interface [chars]
```

Explanation The current configuration has resulted in an oversubscription at the HQF level. This condition can be caused by shaping in a parent policy-map, bandwidth being reserved for ATM VPs or MLPoA links, or a combination of all of the above.

Recommended Action The router recognized this condition and has modified its behavior to deal with it. However if this condition is unexpected, verify the configuration and make the appropriate changes.

Error Message

```
%HQF_MAP_TT-4-HQF_WARN_RL_1S: [chars] [hex] [hex]
```

Explanation A warning was generated in the HQF TT NP Mapper.

Recommended Action The router configuration might not be exactly as desired, verify the configuration to make sure it is within the system limits.

Error Message

%HQF_MAP_TT-5-HQF_4_LEVEL_CHANGE: [int] sub-interfaces carrying [int] sessions
already use [chars] levels, they are left untouched

Explanation Four-level HQF scheduling was enabled or disabled by CLI command, existing HQF hierachies not adhering to the new mode are left untouched. Disconnecting and reconnecting affected sessions is required in order to have them adhere to the new mode.

Error Message

%HQF_MAP_TT-6-HQF_4_LEVEL_DISABLED: Four level HQF scheduling has been disabled

Explanation Four level HQF has been disabled as a result of a CLI command

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

Error Message

%HQF_MAP_TT-6-HQF_4_LEVEL_ENABLED: Four level HQF scheduling has been enabled

Explanation Four level HQF has been enabled as a result of a CLI command

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

Error Message

%HQF_MAP_TT-6-HQF_INFO_OVERSUBSCRIPTION_CLEARED: [chars]

Explanation The HQF over-subscription condition on interface [chars] has cleared.

Recommended Action Informational message only. No action is required.

Error Message

%HQF_MAP_TT-6-HQF_INFO_OVERSUBSCRIPTION_DETECTED: [chars]

Explanation The current configuration has resulted in an oversubscription at the HQF level. This can be because of shaping in a parent policy-map, bandwidth being reserved for ATM VPs or MLPoA links or a combination of all of the above.

Recommended Action The router recognized this condition and has modified its behavior to deal with it. However, if this condition is unexpected verify the configuration and make the appropriate changes.

HSRP Messages

Error Message

%HSRP-3-MISCONFIG: Attempt to change [chars] MAC address to [enet] when DECNET already running

Explanation An HSRP group attempted to become active on an interface that can only support a single MAC address and that is running DECnet. If the **standby use-bia** command has not been entered on the interface, HSRP would normally set the interface MAC address to the HSRP virtual MAC address, but this configuration is not allowed if DECnet is running.

Recommended Action Enter the **standby use-bia** command on the interface.

Error Message

%HSRP-3-NOSOCKET: Unable to open socket

Explanation The system was unable to initialize an IP connection for the hot standby protocol.

Recommended Action Ensure that there is at least one interface configured to run IP.

Error Message

%HSRP-4-BADAUTH: Bad authentication from [IP_address], group [dec], remote state [chars]

Explanation Two routers participating in HSRP disagree on the valid authentication string.

Recommended Action Enter the **standby authentication** command to repair the HSRP authentication discrepancy between the local system and the one whose IP address was reported.

Error Message

%HSRP-4-BADAUTH2: Bad authentication from [IP_address]

Explanation Two routers participating in HSRP disagree on the valid authentication string.

Recommended Action Enter the **standby authentication** command to repair the HSRP authentication discrepancy between the local system and the one whose IP address was reported.

Error Message

%HSRP-4-BADVIP: [chars] Grp [dec] address [IP_address] is in the wrong subnet for this interface

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

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

Error Message

```
%HSRP-4-DIFFVIP1: [chars] Grp [dec] active routers virtual IP address [IP_address]
is different to the locally configured address [IP_address]
```

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

Recommended Action   Check the configuration on all HSRP routers in the group and ensure that all HSRP routers are configured with the same virtual IP address.

Error Message

```
%HSRP-4-DUPADDR: Duplicate address [IP_address] on [chars], sourced by [enet]
```

Explanation   The IP address in an HSRP message that was received on the specified interface is the same as the IP address of the router. Another router might be configured with the same IP address. The most likely cause of this condition is a network loop or a misconfigured switch that is causing the router to see its own HSRP Hello messages.

Recommended Action   Check the configurations on all the HSRP routers to ensure that the interface IP addresses are unique. Check that no network loops exist. If port channels are configured, check that the switch is correctly configured for port channels. Enter the **standby use-bia** command so that the error message displays the interface MAC address of the sending router, which can be used to determine if the error message is caused by a misconfigured router or a network loop.

Error Message

```
%HSRP-4-DUPVIP1: [chars] Grp [dec] address [IP_address] is already assigned to
[chars] group [dec]
```

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

Recommended Action   Check the configuration on all HSRP routers and ensure that the virtual IP address of each HSRP group is unique.

Error Message

```
%HSRP-4-DUPVIP2: [chars] Grp [dec] address [IP_address] is already assigned on
this interface
```

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

Recommended Action   Check the configuration on all HSRP routers and ensure that the virtual IP address of each HSRP group is unique.

Error Message

```
%HSRP-4-DUPVIP3: [chars] Grp [dec] address [IP_address] is already assigned to,
or overlaps with, an address on another interface or application
```

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

Recommended Action Check the configuration on all HSRP routers and ensure that the virtual IP address of each HSRP group is unique.

Error Message

```
%HSRP-5-STATECHANGE: %s Grp %d state %s - %s
```

Explanation The router has changed state

Recommended Action No action is required.

Error Message

```
%HSRP-6-STATECHANGE: [chars] Grp [dec] state [chars] - [chars]
```

Explanation The router has changed state.

Recommended Action No action is required.

HTSP Messages

Error Message

```
%HTSP-3-CADENCENOTSUPPORTED: voice port [chars]: ring cadence not suitable for
caller id. on_time_first=[dec] off_time_first=[dec] on_time_second=[dec]
off_time_second=[dec]
```

Explanation Ring off period is not sufficient for caller id transmission. If caller id transmission during ring is configured make sure that the ring off duration is long enough.

Recommended Action If caller id transmission during ring is configured make sure that the ring off duration is long enough. Ensure that the CPTONE setting and caller-ID alerting settings are correct.

Error Message

```
%HTSP-3-CAPABILITYMISMATCH: voice port [chars]: call connection id [[hex] [hex]
[hex] [hex]]
```

Explanation There was a capabilities mismatch between the two call legs. Capabilities are negotiated between call legs for CODEC, VAD and FAX rate.

Recommended Action Check that the dial peer configuration is appropriate for the interface in question. Also check that and configuration on the interface is correct.

Error Message

```
%HTSP-3-DSPALARM: voice port [chars]: status=[hex] message=[hex] text=[chars]
```

Explanation   The DSP reported a fatal error. All calls on the DSP were dropped and a DSP reload was attempted.

Recommended Action   Verify that the DSP reloaded properly by attempting to place a call on the affected voice port. Contact your technical support representative, include the full text of the error message.

Error Message

```
%HTSP-3-NOEVENT: no free event structure available from [chars] for DSP message
```

Explanation   There were no event structures remaining in the system pools to alert the router of a voice or signaling event.

Recommended Action   Check that the voice port for which the event was reported is still operational. If not, clear the voice port.

Error Message

```
%HTSP-3-TRUNKNOTSUPPORTED: voice port [chars]: Ground Start trunking not supported
```

Explanation   This voice port does not support the connection trunk command when ground start signaling is configured. Trunking mode on this voice is supported when using loop start signaling.

Recommended Action   Shut down the voice port, remove the connection trunk and/or signal groundStart command from the voice port configuration, and unshut the voice port.

Error Message

```
%HTSP-5-UPDOWN: Trunk port(channel) [%s] is %s
```

Explanation   Trunk port:channel changed state.

Recommended Action   No action is required.

Error Message

```
%HTSP-5-VPM_BUSYOUT: voice port [chars]: [chars] busyout
```

Explanation   The voice port busyout status changed.

Recommended Action   Use show voice busyout command to find out the reason why voice port busyout monitoring is triggered.

HTTP Messages

Recommended Action   The following are Hypertext Transfer Protocol (HTTP) messages.

Error Message

%HTTP-3-INIT_FAIL: HTTP Process Init failed.

Explanation Initialization of the HTTP Subsystem has failed.

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

Error Message

%HTTP-3-OUTOF_MEM: HTTP out of memory.

Explanation An error occurred during initialization of the HTTP process. The HTTP process could not create crucial internal data structures that are required for operation of the HTTP subsystem. The most likely reason for this condition is an exhaustion of system memory.

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

Error Message

%HTTP-3-PROC_NOCREAT: Unable to create HTTP process.

Explanation An error occurred during initialization of the HTTP process. The HTTP process that processes all HTTP requests and responses could not be created.

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

Error Message

%HTTP-3-SERVER_RESTART_FAILED: Server restart failed. Disabling HTTP server.

Explanation TCP process was restarted affecting the HTTP server. Attempts to restart HTTP server failed.

Recommended Action Check status of TCP process. Enable the HTTP server after TCP process has started.

Error Message

%HTTP-6-SERVER_SETUP_FAILED: Server setup failed

Explanation Setup of the HTTP(S) server to listen on the specified port number has failed.

Recommended Action Disable the server, verify that port number is correct and enable the server.Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

%HTTPC-3-CACHE_MEM: HTTP Client Cache Init out of memory.

Explanation Unavailable

Recommended Action Unavailable

Error Message

%HTTPC-3-CONNECT_NULL: NULL connection structure for fd([dec]) - closing socket.

Explanation The HTTP Client is receiving the socket READ event but itfails to locate the connection structure for this file descriptor(fd).If this is seen continuously in a loop, it is an indication that something has gone wrong in the socket code. Since the socket is immediately closed after this event, the HTTP client should stop seeing READ event.

Recommended Action Record the error and traceback and report it to the system administrator.

Error Message

%HTTPC-3-COOKIE_MEM: HTTP Client runs out of allowable memory to store cookies.

Explanation The total memory allocated for storing cookies has run out. All cookies received from the HTTP server will be dropped. Users may no longer be able to interact with a session-based origin server until memory is freed up.

Recommended Action Users may want to try their requests at a later time or contact the system administrator to increase the maximum RAM allowed for saving HTTP cookies.

Error Message

%HTTPC-3-INIT_FAIL: HTTP Client Process Init failed.

Explanation Unavailable

Recommended Action Unavailable

Error Message

%HTTPC-3-OUTOF_MEM: HTTP Client out of memory.

Explanation Unavailable

Recommended Action Unavailable

Error Message

%HTTPC-3-OUTOF_SYNC: HTTP Client header tables out of sync.

Explanation Unavailable

Recommended Action Unavailable

Error Message

`%HTTPC-3-PROC_NOCREAT: Unable to create HTTP Client process.`

Explanation Unavailable

Recommended Action Unavailable

Error Message

`%HTTPC-3-RECEIVE_SOCK_READ_EVENT_WHILE_DISABLED: Received socket read event while read interest is disabled callID([dec]) fd([dec]) - closing socket.`

Explanation The HTTP Client is receiving the socket READ event while the READ interest is being disabled. Something has gonewrong between the http client and the socket interfaced.

Recommended Action Record the error and report it to the system administrator.

Error Message

`%HTTPC-6-CLOSE_SRV_CONNECT: The connection to server [IP_address] appears to be hung and will be closed.`

Explanation Messages are being backed up in the HTTP Client's write queue in the connection with the specified server. The connection is assumed to have gone bad and the HTTP Client is closing the connection.

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

Error Message

`%HTTPC-6-CONNECT_FAILED: The connection to server [IP_address] failed`

Explanation Unavailable

Recommended Action Unavailable

Error Message

`%HTTPC-6-REQUEST_FAILED: request URI [chars] failed`

Explanation Unavailable

Recommended Action Unavailable

Error Message

`%HUB-1-BADHUB: Invalid hub type %d and number %d`

Explanation An internal software error occurred.

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

Error Message

%HUB-1-BADUNIT: Bad port number %d

> **Explanation** An internal software error occurred.

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

Error Message

%HUB-1-NOMEMORY: msgtxt_nomemory

> **Explanation** The system detected that there is not enough memory for the hub initialization.

> **Recommended Action** If conditions warrant, upgrade to larger memory configuration.

Error Message

%HUB-1-READERR: Read op %d not allowed

> **Explanation** An internal software error occurred.

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

Error Message

%HUB-1-WRITEERR: Write op %d not allowed

> **Explanation** An internal software error occurred.

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

HUJR Messages

Error Message

%HUJR-3-RDWRFAIL: Read/write failed [[chars]]

> **Explanation** A read or write error occurred during an attempt to access the hardware.

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

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

Error Message

```
%HULC_LICENSE-1-LICENSE_REGISTER_FAILED: %s - rc = %d
```

Explanation Licensing initialization failed

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HW-2-OBSOLETE_HW_VER: Module Version in [chars] is obsolete
*********************************************************************** *
IMPORTANT !!! * * The module in [chars] is obsolete and must be returned * * via
RMA to Cisco Manufacturing. If it is a lab unit, * * it must be returned to Proto
Services for upgrade. *
***********************************************************************
```

Explanation The Smart Cookie is obsolete and needs to be replaced ASAP.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

HWCONF Messages

Error Message

```
%HWCONF-6-REGISTER: hwconf-[dec]:[chars] IP  :[IP_address] Socket:[dec]
DeviceType:[chars] has registered.
```

Explanation Configured hwconf has registered to the SCCP server.

Recommended Action No action is required.

Error Message

```
%HWCONF-6-REGISTER_NEW: hwconf-[dec]:[chars] IP  :[IP_address] Socket:[dec]
DeviceType:[chars] has registered.
```

Explanation An hwconf has registered. The hwconf is not yet in current running configuration of the SCCP server.

Recommended Action No action is required.

Error Message

```
%HWCONF-6-UNREGISTER_ABNORMAL: hwconf-[dec]:[chars] IP  :[IP_address]
Socket:[dec] DeviceType:[chars] has unregistered abnormally.
```

Explanation An hwconf has unregistered without sending an unregister message.

Recommended Action No action is required.

Error Message

```
%HWCONF-6-UNREGISTER_NORMAL: hwconf-[dec]:[chars] IP  :[IP_address] Socket:[dec]
DeviceType:[chars] has unregistered normally.
```

Explanation An hwconf has successfully unregistered.

Recommended Action No action is required.

HWECAN Messages

The following are HW Echo Canceller messages.

Error Message

```
%HWECAN-5-DEVICE: HWECAN Device [dec] in slot [dec] [chars] [dec], changed state
to [chars]
```

Explanation The HWECAN individual device has changed state.

Recommended Action No action is required.

Error Message

```
%HWECAN-5-INITFAILURE: HWECAN in slot [dec] [chars] [dec], Initialization Failed:
[chars]
```

Explanation Initialization of the HWECAN echo canceller has failed.

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

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

Error Message

%HWECAN-5-INSUFFICIENT: Insufficient EC channel resource to allocate for slot
[dec] port [dec] ts [dec]

Explanation   A free HWECAN channel is not available for allocation to the voice channel.

Recommended Action   Change the tail-length configuration to get more ECAN channels. Specify
fewer time slots for voice configuration. Install or replace additional HWECAN resources to allow
more complex configurations.

Error Message

%HWECAN-5-NACK: HWECAN in slot [dec] [chars] [dec] NACKed the Command/Query [hex]

Explanation   The command or the query is not understood by the HWECAN device.

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

Error Message

%HWECAN-5-NOMSGPOOL: HWECAN in slot [dec] [chars] [dec], Failed to get [chars] Msg
buffer Pool

Explanation   A buffer pool for Tx or Rx message communication could not be allocated.

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

Error Message

```
%HWECAN-5-TIMEOUT: HWECAN in slot [dec] [chars] [dec] failed to return response
for Command/Query [hex]
```

Explanation A response to the previous command was not received in a timely manner.

Recommended Action Check the status of the HWECAN echo canceller and replace it, if required.

Error Message

```
%HWECAN-5-UPDOWN: HWECAN in slot [dec] [chars] [dec], changed state to [chars]
with [dec] Channels
```

Explanation The HWECAN has changed state.

Recommended Action No action is required.

HWIC_1GE_SFP Messages

The following are Gigabit Ethernet High-speed WAN Interface Card (HWIC) messages.

Error Message

```
%HWIC_1GE_SFP-1-NOMEMORY: HWIC_1GE_SFP [dec]: Memory allocation failure; could
not allocate [chars]
```

Explanation An attempt to allocate memory for the specified HWIC-1GE-SFP has failed.

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

Error Message

```
%HWIC_1GE_SFP-3-BAD_CLOCK: PL3 clock is missing at FPGA
```

Explanation An attempt by MAC to acquire clocks on the system bus has failed. This condition indicates a hardware problem.

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

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

Error Message

```
%HWIC_1GE_SFP-3-DUPLICATE_SN: SFP in interface [chars] has the same serial number
as another SFP
```

Explanation   The serial number of the SFP matches that of another interface on the system. Cisco SFPs are assigned unique serial numbers.

Recommended Action   Verify that the SFP was obtained from Cisco or a supported vendor.

Error Message

```
%HWIC_1GE_SFP-3-ID_MISMATCH: SFP in interface [chars] failed identification check
```

Explanation   The system was unable to verify the identity of the SFP.

Recommended Action   Verify that the SFP was obtained from Cisco or from a supported vendor. Use the Cisco Software Advisor tool to check if the Cisco IOS software that is running on the system supports the SFP. If the SFP is newer, a system software upgrade might be required.

Error Message

```
%HWIC_1GE_SFP-3-INTERNAL_ERROR: [chars]
```

Explanation   The router encountered an internal software error.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%HWIC_1GE_SFP-3-INVALID_FPGA_VER: Incorrect FPGA version. Expected [hex] Read
[hex]

Explanation One or more of the following errors have occurred: An invalid FPGA or download has
occurred.

Explanation An error involving invalid clocking has occurred.

Explanation A programming error has occurred.

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

Error Message

%HWIC_1GE_SFP-3-SFP_BAD_CC: Interface [chars] SFP [chars] ID fields check sum
failed.

Explanation The specified SFP ID fields failed a checksum operation.

Recommended Action Reinsert or replace the SFP.

Error Message

%HWIC_1GE_SFP-3-UNRECOGNIZED_VENDOR: SFP in interface [chars] is manufactured by
an unrecognized vendor

Explanation The system was unable to match the SFP manufacturer with one on the known list of
Cisco SFP vendors.

Recommended Action Verify that the SFP was obtained from Cisco or a supported vendor. Use the
Software Advisor tool to check if the Cisco IOS software running on the system supports the SFP.
If the SFP is newer, a system software upgrade might be required.

Error Message

%HWIC_1GE_SFP-3-VN_DATA_CRC_ERROR: SFP in interface [chars] has bad crc

Explanation The SFP does not contain a valid CRC in the EEPROM data.

Recommended Action Reinsert or replace the SFP.

Error Message

```
%HWIC_1GE_SFP-4-SFP_INTERR: Interface [chars] internal error occurred in setup for
SFP
```

Explanation The system could not allocate resources, or had some other problem, while the specified SFP interface was being set up.

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

Error Message

```
%HWIC_1GE_SFP-6-SFP_IN: Interface [chars] [chars] SFP has been inserted.
```

Explanation An HWIC-1GE-SFP interface SFP has been inserted.

Recommended Action No action is required.

Error Message

```
%HWIC_1GE_SFP-6-SFP_OUT: Interface [chars] SFP has been removed.
```

Explanation An HWIC-1GE-SFP interface SFP has been removed.

Recommended Action No action is required.

Error Message

```
%HWIC_1GE_SFP-6-STARTUP: [chars] initialized
```

Explanation The specified HWIC-1GE-SFP has initialized successfully.

Recommended Action No action is required.

Error Message

```
%HWIC_ADSL-1-ADSLINITFAIL: HWIC_ADSL [dec]: ADSL driver setup failure; could not
allocate [chars].
```

Explanation An attempt to initialize the ADSL driver for the HWIC_ADSL has failed.

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

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

Error Message

%HWIC_ADSL_BRI-1-FWDLFAIL: HWIC_ADSL_BRI [dec]: FPGA download failure; could not download [chars].

Explanation An attempt to download FPGA firmware for the HWIC_ADSL_BRI has failed. This interface cannot be used.

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

Error Message

%HWIC_ADSL_BRI-1-NOMEMORY: HWIC_ADSL_BRI [dec]: Memory allocation failure; could not allocate [chars].

Explanation An attempt to allocate memory for the HWIC_ADSL_BRI has failed. More RAM may be required to execute this image.

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

Error Message

%HWIC_ADSL_BRI-7-IRQSPURIOUSEVENT: HWIC_ADSL_BRI : Spurious IRQ[dec] interrupt [hex] happened.

Explanation A spurious IRQ interrupt for the indicated HWIC-ADSL/BRI has occurred.

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

Error Message

```
%HWIC_ADSL_BRI-7-NETSPURIOUSEVENT: HWIC_ADSL_BRI [dec]: Spurious network
interrupt [hex] happened, mask [hex].
```

Explanation A spurious network interrupt for the indicated HWIC-ADSL/BRI has occurred.

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

Error Message

```
%HWIC_BRI-1-BRIINITFAIL: HWIC_BRI [dec]: BRI driver setup failure; could not
initialize [chars].
```

Explanation An attempt to initialize the BRI driver for the indicated HWIC_BRI has failed.

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

HWIC_CDSX_MODULE

The following are HWIC T1E1 module messages.

Error Message

```
%HWIC_CDSX_MODULE-3-CDSX_IPC_CMD_FAIL: IPC Command (message type:[hex],
opcode:[hex]) to the firmware Failed on slot([dec]) subslot([dec]) due to [chars]
```

Explanation IPC message to the firmware failed due to Mailbox FULL or No Buffers to send message

Recommended Action Firmware is not responding or too slow. Reset of the board is required

Error Message

```
%HWIC_CDSX_MODULE-3-FDLLLOOPDOWN: Controller [chars] - FDL line loopdown code
detected, deactivating line loopback.
```

Explanation Detected FDL line loopdown code on the unit, deactivating line loopback.

Recommended Action Informational message only.

Error Message

%HWIC_CDSX_MODULE-3-FDLLLOOPUP: Controller [chars] - FDL line loopup code
detected, activating line loopback mode.

Explanation Detected FDL line loopup code on the unit, activating line loopback.

Recommended Action Informational message only.

Error Message

%HWIC_CDSX_MODULE-3-FDLLREQFAILED: Controller [chars] - Failed to put the remote
end in line loopback mode via FDL.

Explanation The T1 FDL line loopup code was sent to the remote end but the remote end did not
activate line loopback.

Recommended Action This could be caused by controller configuration and/or line problem. Check if
the controllers are both up.

Error Message

%HWIC_CDSX_MODULE-3-FDLLREQOK: Controller [chars] - Remote end is put in line
loopback mode via FDL.

Explanation The T1 FDL line loopup code was sent to the remote end from the unit and the remote
end successfully activated line loopback.

Recommended Action Informational message only.

Error Message

%HWIC_CDSX_MODULE-3-FDLPLOOPDOWN: Controller [chars] - FDL payload loopdown code
detected, deactivating payload loopback.

Explanation Detected FDL payload loopdown code on the unit, deactivating payload loopback.

Recommended Action Informational message only.

Error Message

%HWIC_CDSX_MODULE-3-FDLPLOOPUP: Controller [chars] - FDL payload loopup code
detected, activating payload loopback mode.

Explanation Detected FDL payload loopup code on the unit, activating payload loopback.

Recommended Action Informational message only.

Error Message

%HWIC_CDSX_MODULE-3-FDLPREQFAILED: Controller [chars] - Failed to put the remote
end in payload loopback mode via FDL.

Explanation The T1 FDL payload loopup code was sent to the remote end but the remote end did not
activate payload loopback.

Recommended Action This could be caused by controller configuration and/or line problem. Check if
the controllers are both up.

Error Message

%HWIC_CDSX_MODULE-3-FDLPREQOK: Controller [chars] - Remote end is put in payload
loopback mode via FDL.

Explanation The T1 FDL payload loopup code was sent to the remote end from the unit and the
remote end successfully activated payload loopback.

Recommended Action Informational message only.

Error Message

%HWIC_CDSX_MODULE-3-IBOCLOOPDOWN: Controller [chars] - IBOC loopdown code
detected, deactivating line loopback.

Explanation Detected IBOC loopdown code on the unit, deactivating line loopback.

Recommended Action Informational message only.

Error Message

%HWIC_CDSX_MODULE-3-IBOCLOOPUP: Controller [chars] - IBOC loopup code detected,
activating line loopback mode.

Explanation Detected IBOC loopup code on the unit, activating line loopback.

Recommended Action Informational message only.

Error Message

%HWIC_CDSX_MODULE-3-IBOCREQFAILED: Controller [chars] - Failed to put the remote
end in line loopback mode via IBOC.

Explanation The T1 IBOC loopup code was sent to the remote end but the remote enddid not activate
line loopback.

Recommended Action This could be caused by controller configurationand/or line problem. Check if
the controllers are both up.

Error Message

```
%HWIC_CDSX_MODULE-3-IBOCREQOK: Controller [chars] - Remote end is put in line
loopback mode via IBOC.
```

Explanation The T1 IBOC loopup code was sent to the remote end from the unit and the remote end successfully activated line loopback.

Recommended Action Informational message only.

Error Message

```
%HWIC_CDSX_MODULE-3-T1REQCANCELLED: Controller [chars] - T1 remote loopback has
been cancelled.
```

Explanation T1 loopdown code is sent to the remote end from this unit. The remote end is assumed to have received the loopdown code and deactivated loopback mode. However, no test is performed to ensure the remote end indeed deactivated loopback mode.

Recommended Action Informational message only.

Error Message

```
%HWIC_CELL-1-CPU_FW_DNLD_FAIL: CPU fw download failed for NM slot [dec] HWIC slot
[dec]
```

Explanation The NIOS firmware download has failed for this module.

Recommended Action If the problem persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Provide the output of show cellular x/x/x all and show tech-support command with the message output.

Error Message

```
%HWIC_CELL-1-DMA_INIT_FAIL: HWIC cellular DMA chan [dec] failure for NM slot [dec]
HWIC slot [dec] [chars]
```

Explanation The DMA hardware has failed for the specific module.

Recommended Action If the problem persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Provide the output of show cellular x/x/x all and show tech-support command with the message output.

Error Message

```
%HWIC_CELL-1-DMA_TX_FAILURE: HWIC cellular DMA transmit failure for NM slot [dec]
HWIC slot [dec], dma_q_type [dec]. [chars]
```

Explanation The DMA transmit failed for the specific module.

Recommended Action If the problem persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Provide the output of show cellular x/x/x all and show tech-support command with the message output.

Error Message

```
%HWIC_CELL-1-FPGA_DNLD_FAIL: FPGA download failed for NM slot [dec] HWIC slot
[dec], [chars]
```

Explanation The firmware/FPGA download failed for the specified module.

Recommended Action If the problem persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Provide the output of show cellular x/x/x all and show tech-support command with the message output.

Error Message

```
%HWIC_CELL-1-INCORRECT_SIZE_FOR_SLAVE_ACCESS: HWIC_CELL  : incorrect size for
slave access: [chars]
```

Explanation An attempt by the host to slave read/write to NIOS SDRAM failed. It should use multiple of 32 bits for read/write.

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

Error Message

`%HWIC_CELL-1-INTF_INIT_FAIL: HWIC cellular interface init failed for NM slot [dec] HWIC slot [dec] hwic type [hex]`

Explanation   The HWIC cellular interface initiation failed for the specified module.

Recommended Action   If the problem persiast, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Provide the output of show cellular x/x/x all and show tech-support command with the message output.

Error Message

`%HWIC_CELL-1-MAILBOX_FAIL: IPC mailbox allocation failed for NM slot [dec] HWIC slot [dec]`

Explanation   The IPC mailbox allocation failed for the specified module.

Recommended Action   If the problem persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Provide the output of test cell-hwic x/x/x virt-con-to-IOS and show tech-support command with the message output.

Error Message

`%HWIC_CELL-1-MAILBOX_RX_FAIL: HWIC_CELL  : mailbox message receive failure: [chars]. message type is [hex], message length is [dec]`

Explanation   The NIOS send mailbox message to host, but the ownership bit has not been set.

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

Error Message

`%HWIC_CELL-1-MBX_TX_FAIL: HWIC_CELL  : Mailbox msg transmit failure.`

Explanation An attempt by the host to send mailbox message to NIOS failed. This interface cannot be used.

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

Error Message

`%HWIC_CELL-1-MGMT_ERROR: [[chars]] Error response ([hex]) received from modem ([chars]).`

Explanation The host has received an error from the modem.

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

Error Message

`%HWIC_CELL-1-MODEM_ACK_FAIL: [[chars]] Modem Ack not received.`

Explanation The host has not received an ACK for the command sent to the modem.

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

Error Message

```
%HWIC_CELL-1-MODEM_INVALID: HWIC_CELL  : invalid modem product id=[hex] or vendor
id=[hex] for the given SKU=[hex] for NM slot [dec] HWIC slot [dec]
```

Explanation An incorrect modem has been installed on the HWIC.

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

Error Message

```
%HWIC_CELL-1-NOMEMORY: HWIC cellular no more memory for NM slot [dec] HWIC slot
[dec]. [chars]
```

Explanation An attempt to allocate memory for the specifed module failed.

Recommended Action If the problem persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Provide the output of show cellular x/x/x all and show tech-support command with the message output.

Error Message

```
%HWIC_CELL-1-POOL_INIT_FAIL: HWIC cellular pool init failed for NM slot [dec] HWIC
slot [dec] pool name [chars]
```

Explanation The HWIC cellular pool initiation failed for the specified module.

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

Error Message

```
%HWIC_CELL-1-RING_INIT_FAIL: HWIC cellular dma queue creation failed for NM slot
[dec] HWIC slot [dec] dma queue type [dec]
```

Explanation The HWIC cellular DMA queue creation has failed for the specified module.

Recommended Action If the problem persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Provide the output of show cellular x/x/x all and show tech-support command with the message output.

Error Message

```
%HWIC_CELL-1-WRONGDMA_TYPE: HWIC cellular wrong DMA queue type [dec] for NM slot
[dec] HWIC slot [dec]
```

Explanation An incorrect DMA queue type has been used for the specifed module.

Recommended Action If the problem persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Provide the output of show cellular x/x/x all and show tech-support command with the message output.

Error Message

```
%HWIC_CELL-1-WRONGWHIP_TYPE: HWIC cellular wrong control and mgmt msg header type
for NM slot [dec] HWIC slot [dec], for DMA channel [dec] and message id [hex]
```

Explanation The user has used an incorrect WHIP header type for the specifed module.

Recommended Action If the problem persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Provide the output of show cellular x/x/x all and show tech-support command with the message output.

Error Message

```
%HWIC_CELL-1-WRONG_PID: HWIC_CELL  : unable to read product ID  : [chars].
```

Explanation An attempt to read the product ID of the HWIC has failed.

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

Error Message

```
%HWIC_CT3-1-FPGADNLDFAIL: HWIC_CT3 [dec]: FPGA download failure; could not
download [chars].
```

Explanation An attempt to download FPGA firmware for the HWIC_CT3 failed. This interface cannot be used.

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

Error Message

```
%HWIC_CT3-1-IPCINITFAIL: HWIC_CT3 [dec]/[dec]: IPC Init Error: [chars].
```

Explanation IPC Layer could not be initialized for the HWIC_CT3.

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

Error Message

```
%HWIC_CT3-1-NIOSFWDNLDFAIL: HWIC_CT3 [dec]: NIOS FW download failure; could not
download [chars].
```

Explanation An attempt to download NIOS FW firmware for the HWIC_CT3 failed. This interface cannot be used.

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

Error Message

```
%HWIC_CT3-7-ERRORINT: [chars]
```

Explanation A spurious event happened for the HWIC_CT3.

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

Error Message

```
%HWIC_CT3_MODULE-3-CDSX_IPC_CMD_FAIL: IPC Command (message type:[hex],
opcode:[hex]) to the firmware Failed on slot([dec]) due to [chars]
```

Explanation IPC message to the firmware failed due to Mailbox FULL or No Buffers to send message

Recommended Action Firmware is not responding or too slow. Reset of the board is required.

Error Message

```
%HWIC_CT3_MODULE-3-IBOCLOOPDOWN: Controller [chars] - IBOC loopdown code
detected, deactivating line loopback.
```

Explanation Detected IBOC loopdown code on the unit, deactivating line loopback.

Recommended Action Informational message only.

Error Message

```
%HWIC_CT3_MODULE-3-IBOCLOOPUP: Controller [chars] - IBOC loopup code detected,
activating line loopback mode.
```

Explanation Detected IBOC loopup code on the unit, activating line loopback.

Recommended Action Informational message only.

Error Message

%HWIC_CT3_MODULE-3-IBOCREQFAILED: Controller [chars] - Failed to put the remote
end in line loopback mode via IBOC.

Explanation The T3 IBOC loopup code was sent to the remote end but the remote end did not activate line loopback.

Recommended Action This could be caused by controller configurationand/or line problem. Check if the controllers are both up.

Error Message

%HWIC_CT3_MODULE-3-IBOCREQOK: Controller [chars] - Remote end is put in line
loopback mode via IBOC.

Explanation The T3 IBOC loopup code was sent to the remote end from the unit and the remote end successfully activated line loopback.

Recommended Action Informational message only.

Error Message

%HWIC_CT3_MODULE-3-MDLLLOOPDOWN: Controller [chars] - MDL line loopdown code
detected, deactivating line loopback.

Explanation Detected MDL line loopdown code on the unit, deactivating line loopback.

Recommended Action Informational message only.

Error Message

%HWIC_CT3_MODULE-3-MDLLLOOPUP: Controller [chars] - MDL line loopup code detected,
activating line loopback mode.

Explanation Detected MDL line loopup code on the unit, activating line loopback.

Recommended Action Informational message only.

Error Message

%HWIC_CT3_MODULE-3-MDLLREQFAILED: Controller [chars] - Failed to put the remote
end in line loopback mode via MDL.

Explanation The T3 MDL line loopup code was sent to the remote end but the remote end did not activate line loopback.

Recommended Action This could be caused by controller configuration and/or line problem. Check if the controllers are both up.

Error Message

`%HWIC_CT3_MODULE-3-MDLLREQOK: Controller [chars] - Remote end is put in line`
`loopback mode via MDL.`

Explanation The T3 MDL line loopup code was sent to the remote end from the unit and the remote end successfully activated line loopback.

Recommended Action Informational message only.

Error Message

`%HWIC_CT3_MODULE-3-MDLPLOOPDOWN: Controller [chars] - MDL payload loopdown code`
`detected, deactivating payload loopback.`

Explanation Detected MDL payload loopdown code on the unit, deactivating payload loopback.

Recommended Action Informational message only.

Error Message

`%HWIC_CT3_MODULE-3-MDLPLOOPUP: Controller [chars] - MDL payload loopup code`
`detected, activating payload loopback mode.`

Explanation Detected MDL payload loopup code on the unit, activating payload loopback.

Recommended Action Informational message only.

Error Message

`%HWIC_CT3_MODULE-3-MDLPREQFAILED: Controller [chars] - Failed to put the remote`
`end in payload loopback mode via MDL.`

Explanation The T3 MDL payload loopup code was sent to the remote end but the remote end did not activate payload loopback.

Recommended Action This could be caused by controller configuration and/or line problem. Check if the controllers are both up.

Error Message

`%HWIC_CT3_MODULE-3-MDLPREQOK: Controller [chars] - Remote end is put in payload`
`loopback mode via MDL.`

Explanation The T3 MDL payload loopup code was sent to the remote end from the unit and the remote end successfully activated payload loopback.

Recommended Action Informational message only.

Error Message

`%HWIC_CT3_MODULE-3-T3REQCANCELLED: Controller [chars] - T3 remote loopback has been cancelled.`

Explanation T3 loopdown code is sent to the remote end from this unit. The remote end is assumed to have received the loopdown code and deactivated loopback mode. However, no test is performed to ensure the remote end indeed deactivated loopback mode.

Recommended Action Informational message only.

Error Message

`%HWIC_HOST-1-BAD_HWIC_INT: HWIC_HOST  : Invalid Interrupt Table [dec]`

Explanation The interrupt table number is not supported by the HWIC library. This condition indicates a software error.

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

Error Message

`%HWIC_HOST-1-BAD_HWIC_INTERFACE_NUM: HWIC_HOST  : Invalid Interface Number [dec]`

Explanation The HWIC Library API function does not recognize this interface. This condition indicates a software error.

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

Error Message

```
%HWIC_HOST-1-BAD_HWIC_SLOT: HWIC_HOST  : Invalid HWIC slot [dec]
```

Explanation The HWIC slot is not supported on this platform. This condition indicates a software error.

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

Error Message

```
%HWIC_HOST-1-BAD_IDB: HWIC_HOST  : Invalid Interface Descriptor Block [hex]
```

Explanation The IDB that was passed to an HWIC host driver library API is of a null value or contains invalid null pointers. This condition indicates a software error.

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

Error Message

```
%HWIC_HOST-1-DMA_ERROR: HWIC_HOST  : Host termination logic experienced a DMA
error for Interface Descriptor Block [hex]
```

Explanation The host termination logic has encountered an HWIC read or write error for the interface described by the IDB. This condition indicates a software error.

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

Error Message

%HWIC_HOST-1-INCOMPATIBLE_CARDS: [chars] card cannot coexist with [chars] card,
power down chassis, remove [chars] card and reboot

    Explanation The HWIC_ESW_4/8FE or ESWILP_16/36FE cards cannot coexist with
EHWIC_4/8ESWG card.

    Recommended Action Remove the HWIC_ESW_4/8FE or ESWILP_16/36FE from chassis.

Error Message

%HWIC_HOST-1-REG_RW_ERROR: HWIC_HOST : Host termination logic experienced an HWIC
read/write error for Interface Descriptor Bl ock [hex]

    Explanation The host termination logic has encountered an HWIC read or write error for the
interface specified by the IDB. This condition indicates a software error.

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

Error Message

%HWIC_HOST-1-REG_RW_TIMEOUT_ERROR: HWIC_HOST : Host termination logic
experienced an HWIC read/write timeout error for Interface Descriptor Block [hex]

    Explanation The host termination logic has encountered a timeout error during an HWIC read or
write operation for the interface specified by the IDB. This condition indicates a software error.

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

Error Message

```
%HWIC_HOST-1-RXCLK_MISSING_ERROR: HWIC_HOST  : The HWIC Receive Clock signal was
not detected for Interface Descriptor Block [hex]
```

Explanation The host termination logic has encountered a fatal error. The logic could not detect the HWIC receive clock for the interface specified by the IDB. This condition indicates a software error.

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

Error Message

```
%HWIC_HOST-1-RX_CRC_ERROR: HWIC_HOST  : Host termination logic experienced an HWIC
CRC error for Interface Descriptor Block [hex]
```

Explanation The host termination logic has encountered an HWIC CRC error for the interface specified by the IDB. This condition indicates a software error.

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

Error Message

```
%HWIC_HOST-1-RX_DONE_ERROR: HWIC_HOST  : Improper DONE bit setting in Receive Ring
for Interface Descriptor Block [hex]
```

Explanation The host termination logic has encountered a invalid setting for a Done bit in the buffer descriptor for the interface specified by the IDB. This condition indicates a software error.

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

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

Error Message

```
%HWIC_HOST-1-RX_FORMAT_ERROR: HWIC_HOST  : Host termination logic experienced an
HWIC Format error for Interface Descriptor Block [hex]
```

Explanation The host termination logic has encountered an HWIC format error for the interface specified by the IDB. This condition indicates a software error.

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

Error Message

```
%HWIC_HOST-1-RX_OVERRUN_ERROR: HWIC_HOST  : Host termination logic experienced a
Receive FIFO overrun for Interface Descriptor Block [hex]
```

Explanation The host termination logic has encountered a FIFO overrun during a receive operation for the interface specified by the IDB. This condition indicates a software error.

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

Error Message

```
%HWIC_HOST-1-TX_DONE_ERROR: HWIC_HOST  : Improper DONE bit setting in Transmit
Ring for Interface Descriptor Block [hex]
```

Explanation The host termination logic has encountered a invalid setting for a Done bit in the buffer descriptor for the interface specified by the IDB. This condition indicates a software error.

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

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

Error Message

```
%HWIC_HOST-1-TX_FIRST_LAST_ERROR: HWIC_HOST  : Improper First/Last sequence in
Transmit Ring for Interface Descriptor Block [hex]
```

Explanation   The host termination logic has encountered an invalid first or last sequence in the buffer
descriptor for the interface specified by the IDB. This condition indicates a software error.

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

Error Message

```
%HWIC_SERIAL-1-DISCOVER: NM slot [dec]: only [dec] PCI dev found
```

Explanation   Some of the interface controller devices on HWIC_SERIAL NM did not initialize
properly.

Recommended Action   Power down, reinsert the port module, and reboot.If this message recurs, copy
the error message exactly as it appears on the console or in the system log. Research and attempt to
resolve the error using the Output Interpreter
https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the
Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require
assistance, open a case with the Technical Assistance Center via the Internet at
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

```
%HWIC_SERIAL-1-FPGA_DNLD_FAIL: FPGA download failed for NM slot [dec] HWIC slot
[dec]
```

Explanation   The firmware/FPGA download has failed for this module.

Recommended Action   Check the part number on the WIC card to verify that it is supported in the IOS
release operational on the router.Copy the error message exactly as it appears on the console or in
the system log. Research and attempt to resolve the error using the Output Interpreter

https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HWIC_SERIAL-1-UNKNOWN_WIC: NM slot [dec], wic card has an unknown id [hex]
```

Explanation The software does not recognize the type of WIC card that is plugged into the port module.

Recommended Action Check the part number on the WIC card to verify that it is supported in the IOS release operational on the router.Copy the error message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HWIC_SERIAL-2-SCCFAIL: Init of SCC[dec] for int [dec]/[dec] failed to do [chars]
```

Explanation The software failed to initialize or restart an SCC of a serial interface on HWIC_SERIAL.

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

Error Message

```
%HWIC_SERIAL-3-BSCHUNT: BSC HUNT cmd for int [dec]/[dec] failed
```

Explanation An internal error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HWIC_SERIAL-3-INVALID_CABLE: [chars]: Cable connected is not supported on this
interface.
```

Explanation   The HWIC-16A supports only octal RS232 RJ45 cables. All other cables are invalid.

Recommended Action   Connect the proper cable.

Error Message

```
%HWIC_SERIAL-3-INVALID_CLOCKRATE: Unsupported clock rate req on int [dec]/[dec] -
index [dec]
```

Explanation   An internal software error has occurred.

Recommended Action   Copy the error message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HWIC_SERIAL-3-INVALID_SCC: Config req for invalid SCC via int [dec]/[dec]
```

Explanation   An internal software error has occurred.

Recommended Action   Copy the error message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HWIC_SERIAL-3-INVALID_TXRX: NM slot [dec], WIC card [dec] doesn't support
different tx speed ([dec]) and rx speed ([dec])
```

Explanation   The software does not support different TX and RX speeds.

Recommended Action   Configure the TX speed and the RX speed to be equivalent.

Error Message

%HWIC_SERIAL-3-LINEFLAP: Excessive modem signal transitions detected on line [dec]

Explanation This message is generated when an external device drives an async/tty line at an unexpectedly high bitrate. This high-rate signal flapping can cause excessive CPU loading and power consumption.

Recommended Action Replace cable or remote device.

Error Message

%HWIC_SERIAL-3-NOMEMORY: No memory for [chars] of unit [dec]

Explanation The router does not have enough memory to perform the function.

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

Error Message

%HWIC_SERIAL-3-OWNERR: Buffer owner ship error on int [chars], pak=[hex]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%HWIC_SERIAL-3-SCCRESET: SCC reset for int [dec]/[dec]/[dec] at [chars] failed

Explanation An internal error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HWIC_SERIAL-3-SPI_OP_FAILED: NM base addr - [hex], WIC slot - [dec], SPI op failed
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HWIC_SERIAL-3-TXCOMPNOTIFY: On int [dec]/[dec], tx_comp_notify vector is not set
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HWIC_SERIAL-3-UFHANDLE: UnderFlow handling on int [dec]/[dec] failed.
```

Explanation An internal error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HWIC_SERIAL-4-DCD_CHANGE: Unexpected DCD transition interrupt on wic [dec] port
[dec] occured
```

Explanation Unexpected event has been detected by the software. This should just be a transient condition.

Recommended Action The System should recover. No action is required.

Error Message

`%HWIC_SERIAL-4-FREQ_OUT_OF_RANGE: [chars] Frequency not in Range.`

Explanation Frequency in not in range.

Recommended Action ensure that the DCE side is up and providing clock. No action is required.

Error Message

`%HWIC_SERIAL-4-MISMATCH_FREQ: [chars] Mismatch between configured and measured Freq.`

Explanation There was a mismatch between the configured and the measured frequency.

Recommended Action Re-configure the clock rate network on the serial interface.

Error Message

`%HWIC_SERIAL-5-TOOBIG: On int [chars], tx pak is [dec] bytes`

Explanation A packet greater than the assigned MTU of this serial interface was queued for transmission.

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

Error Message

`%HWIC_SERIAL-5-TOOSMALL: On int [dec]/[dec], tx pak size is [dec] bytes`

Explanation A small packet (less than two bytes) was queued for transmission. The interface cannot handle such small packets for transmission.

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

Error Message

%HWIC_SERIAL-5-UNDERFLOW: Transmit underflow on int [chars]

Explanation While transmitting a frame, the controller chip's local buffer received insufficient data because data could not be transferred to the chip fast enough to keep pace with its output rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

Recommended Action The system should recover. No action is required.

Error Message

%HWIC_SERIAL-6-NOT_IN_SYNC_MODE: [chars] not in sync mode

Explanation The network clocking commands are configured for an asynchronous interface.

Recommended Action Change the mode to synchronous.

Error Message

%HWIC_SERIAL-6-STARTUP: [chars] initialized

Explanation The specified HWIC_SERIAL has initialized successfully.

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

Error Message

%HWIC_SERIAL-6-SYNC_IDB_NULL: sync idb not found

Explanation A null IDB has been encountered

Recommended Action No action is required.

Error Message

%HWIC_T1E1-1-FPGADNLDFAIL: HWIC_T1E1 [dec]: FPGA download failure; could not download [chars].

Explanation An attempt to download FPGA firmware for the HWIC_T1E1 failed. This interface cannot be used.

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

Error Message

%HWIC_T1E1-1-IPCINITFAIL: HWIC_T1E1 [dec]/[dec]: IPC Init Error: [chars].

Explanation IPC Layer could not be initialized for the HWIC_T1E1.

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

Error Message

%HWIC_T1E1-1-NIOSFWDNLDFAIL: HWIC_T1E1 [dec]: NIOS FW download failure; could not download [chars].

Explanation An attempt to download NIOS FW firmware for the HWIC_T1E1 failed. This interface cannot be used.

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

Error Message

%HWIC_T1E1-1-NOMEMORY: HWIC_T1E1 [dec]: Memory allocation failure; could not allocate [chars].

Explanation An attempt to allocate memory for the HWIC_T1E1 failed. More RAM may be required to execute this image.

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

Recommended Action The following are Encryption Advanced Interface Module (EAIM) messages.

Error Message

```
%HWIC_T1E1-7-BADCHANDEL: Application layer failed to disconnect hdlc resource on
chan [chars]
```

Explanation A HWIC_T1E1 chan/pri group deletion happened without disconnecting the hdlc resources associated with the group.This could happen if the application layer did not disconnect all its hdlc resources.

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

Error Message

```
%HWIC_T1E1-7-ERRORINT: [chars]
```

Explanation A spurious event happened for the HWIC_T1E1.

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

Error Message

```
%HWIC_VDSL-1-FPGADNLDFAIL: HWIC_VDSL [dec]: FPGA download failure; could not
download [chars].
```

Explanation An attempt to download FPGA firmware for the HWIC_VDSL failed. This interface cannot be used.

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

Error Message

```
%HWIC_VDSL-1-INITFAIL: [dec]: vdsl [dec]/[dec]/0 - [chars].
```

Explanation An attempt to initialize the HWIC-VDSL failed. This interface cannot be used.

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

Error Message

```
%HWIC_VDSL-1-NIOSFWDNLDFAIL: HWIC_VDSL [dec]: NIOS FW download failure; could not
download [chars].
```

Explanation An attempt to download NIOS firmware for the HWIC_VDSL failed. This interface cannot be used.

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

Error Message

```
%HWIC_VDSL-5-LINK_RATE_CHANGE: HWIC-VDSL [dec]/[dec]/[dec] bandwidth is changed.
```

Explanation The VDSL link has changed its rate of operation because of seamless rate adaptation.

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

Error Message

```
%HWIC_VDSL-5-NOTICE: HWIC VDSL PTM Notice: [chars]
```

Explanation This is a notification message specific to the PTM interface on the VDSL2 HWIC.

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

Error Message

```
%HWIC_VDSL-7-ERRORINT: [chars]
```

Explanation A spurious event happened for the HWIC_VDSL.

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

Error Message

```
%HWIC_VDSL-7-EVPOSTERR: [dec]: VDSL [dec]/[dec]/0, EV([dec]) failed - [chars]
```

Explanation This event could not post to the message process for the HWIC-VDSL.

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

Error Message

```
%HWIC_VDSL-7-INTERNAL_ERR: HWIC VDSL PTM Internal error: [chars]
```

Explanation An internal error occurred. Additional details are available in the error message text.

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

Error Message

```
%HWIC_VDSL-7-IPCMSGFAILED: [dec]: VDSL [dec]/[dec]/0, type([dec]) opcode([dec])
failed - [hex]
```

Explanation The FW IPC is used to download the firmware into the chipset. If the debug mode has been turned on, this message is displayed when the download fails. This message indicates which operation or IPC command has triggered this failure.

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

Error Message

```
%HWIC_VDSL-7-IPCNOBUFF: [dec]: VDSL [dec]/[dec]/0, type([dec]) opcode([dec])
failed - [chars]
```

Explanation The FW IPC failed to allocate a buffer.

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

Error Message

```
%HWIC_VDSL-7-IPCQUEUE: [dec]: VDSL [dec]/[dec]/0, type([dec]) opcode([dec])
failed - [chars]
```

Explanation An error has occurred in the FW IPC queue operation.

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

Error Message

```
%HWIC_VDSL-7-IPCRCVERR: [dec]: VDSL [dec]/[dec]/0, type([dec]) UNKNOWN
opcode([dec]) received
```

Explanation The FW IPC message returned an unknown operation code for the HWIC-VDSL.

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

Error Message

```
%HWIC_VDSL-7-IPCSENDERR: [dec]: VDSL [dec]/[dec]/0, type([dec]) opcode([dec])
failed - [chars]
```

Explanation The FW IPC message could not be sent for the HWIC-VDSL.

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

Error Message

```
%HWIC_VDSL-7-MGMTINTR: HWIC_VDSL [dec]: Management interrupt [chars] received
```

Explanation A spurious event happened for the HWIC_VDSL.

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

Error Message

```
%HWIF_QOS-6-EOM_FORCE_TRUSTED: EoMPLS on %s caused install of 'trust cos' state
```

Explanation If EoMPLS is configured on the interface or any of its subinterfaces, the 'no trust' state is auto-replaced by 'trust cos'.

Recommended Action Remove all EoMPLS configuration from the interface to restore 'no trust'

Error Message

```
%HWIF_QOS-6-EOM_RESTORE_UNTRUSTED: The 'no trust' state is restored on EoMPLS
removal from %s
```

Explanation If EoMPLS is de-configured on the interface and all its subinterfaces, the configured 'no trust' state is restored'.

Recommended Action No action needed

Error Message

```
%HWIF_QOS-6-EOM_TRUST_NOT_INSTALLED: 'no trust' command is not installed on %s in
presence of EoMPLS
```

Explanation If EoMPLS is configured on the interface or any of its subinterfaces, the 'no trust' command is not installed.

Recommended Action Remove all EoMPLS configuration from the interface

HWMATM_MOD Messages

Error Message

```
%HWMATM_MOD-3-APIBADVALUE:
[chars]: Bad passed in value [chars] is [dec].
```

Explanation An error occurred while a request was being configured.

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

Error Message

```
%HWMATM_MOD-3-BADVALUE: [chars]: Computed value [chars] is invalid: [dec].
```

Explanation An error occurred while a value was being calculated.

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

Error Message

```
%HWMATM_MOD-3-ILLEGALFCNCALL:
[chars]: This function should not have been called.
```

Explanation A function was called that should not have been called.

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

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

Error Message

```
%HWMATM_MOD-3-INVALIDTRANSITION:
[chars]: Value changing from [dec] to [dec].
```

Explanation A function was called while a value relating to that function was being transformed.

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

Error Message

```
%HWMATM_MOD-3-NULLPTR: Unexpected null pointer in [chars] at [dec]
```

Explanation An internal software error has occurred.

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

Error Message

```
%HWMATM_MOD-3-SAMEVALUES:
[chars]: [chars] and [chars] set to value [dec] shouldn't be the same.
```

Explanation The values specified in the error message should not be the same at this point in execution. This condition indicates a software error.

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

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

Error Message

```
%HWMATM_MOD-4-RESYNC_EVENT:
[chars]: H/W MATM has started Resync due buffer overrun.
```

Explanation   The hardware MAC address table manager has detected a buffer overrun.

Recommended Action   The hardware MAC address table manager should recover. No action is required.

Error Message

```
%HWMATM_MOD-4-UNEXPECTED_EVENT:
[chars]: H/W MATM does not support given event of value [dec].
```

Explanation   The hardware MAC address table manager has encountered an unexpected process. The system should recover from this error.

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

Error Message

```
%HWMATM_MOD-4-UNSUPPORTED_TYPE:
[chars]: H/W MATM does not support [chars] which is of value [dec].
```

Explanation   The system received an unexpected value. The system should recover from this error.

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

HW_API Messages

Error Message

%HW_API-3-BACKWALK_REQUEST: Backwalk request failed, [chars]

> **Explanation** A request to walk internal data structures has failed. Depending on criticality of the data, accuracy of forwarding might impacted.

> **Recommended Action** Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%HW_API-3-BACKWALK_REQUEST_VALUE: Backwalk request failed, [chars] ([hex])

> **Explanation** A request to walk internal data structures has failed. Depending on criticality of the data, accuracy of forwarding might impacted.

> **Recommended Action** Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%HW_API-3-INVALID_CONTEXT: Invalid context [hex]

> **Explanation** An internal API error has occurred.

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

Error Message

```
%HW_API-3-INVALID_OBJ: Invalid object [hex]
```

Explanation   An internal API error has occurred.

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

Error Message

```
%HW_API-3-INVALID_TYPE: Invalid type [dec]
```

Explanation   An internal API error has occurred.

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

Error Message

```
%HW_API-3-INVALID_WALK_SPEC: Invalid walk spec [hex]
```

Explanation   An internal API error has occurred.

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

Error Message

```
%HW_API-3-NO_OBJ_TYPE_LIST_ENTRY: Invalid sw_obj_type ([dec]) used with
obj_type_list
```

Explanation An internal API error has occurred.

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

Error Message

```
%HW_API-3-NO_OBJ_TYPE_LIST_ENTRY2: Invalid sw_obj_link_type ([dec]) used with
obj_type_list
```

Explanation HW_API-INTERNAL ERROR

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information

Error Message

```
%HW_API-3-RESILIENCE_NO_HANDLER: No handlers in place for [chars] sw object
creation failure.
```

Explanation An internal software error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HW_API-3-VECTOR: Failed to set [chars] vector for [chars], [chars]
```

Explanation An internal API error has occurred.

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

Error Message

```
%HW_API-3-WALK_MODE_UNSUPPORTED: Walk mode '[chars]' unsupported
```

Explanation An internal API error has occurred.

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

HW_MEMORY Messages

Error Message

```
%HW_MEMORY-3-READMEMFAIL:
[chars]: Failed to read [chars] from ASIC.
```

Explanation The system failed to read memory from its hardware. If this condition is occurring with all features on the switch, it indicates a hardware failure.

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

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

Error Message

```
%HW_MEMORY-3-WRITEMEMFAIL:
[chars]: Failed to write [chars] to ASIC.
```

Explanation The system failed to write memory to its hardware. If this condition is occurring with all features on the switch, it indicates a hardware failure.

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

HW_PARSING_ENGINE Messages

Error Message

```
%HW_PARSING_ENGINE-3-DROP_FIFO_OVERFLOW: Parsing Engine Drop Fifo Overflow
```

Explanation This message indicates that the DFC WAN Line Card parsing engine has detected that the Drop FIFO queue has exceeded the maximum limit. New updates will be discarded. The parsing engine continues to process data from the interfaces if possible.

Recommended Action If traffic has resumed, no action is required. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%HW_PARSING_ENGINE-3-INTERRUPT_ERROR: [chars]

Explanation This message indicates that the DFC WAN Line Card parsing engine has detected the specified interrupt event. The message text on the console or in the system log provides more information on this error. The parsing engine continues to process data from the interfaces if possible.

Recommended Action If traffic has resumed, no action is required. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%HW_PARSING_ENGINE-3-MASTER_ABORT: Parsing Engine CPU Master Abort Error

Explanation This message indicates that the DFC WAN Line Card parsing engine has detected a CPU Master Abort Interrupt. A read to a write-only register or a write to a read-only register could cause this interrupt. The parsing engine continues to process data from the interfaces if possible.

Recommended Action If traffic has resumed, no action is required. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%HW_PARSING_ENGINE-3-PARITY_ERROR: Parsing Engine CPU Parity Error

Explanation This message indicates that the DFC WAN Line Card parsing engine has detected a CPU parity. Suspect hardware fault on second occurrence only. Otherwise, the Parsing Engine continues to process data from the interface if possible.

Recommended Action If traffic has resumed, no action is required. If this message recurs, copy the message exactly as it appears on the console or in the system log.Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%HW_PARSING_ENGINE-3-RP_INT_WATCHDOG_TIMEOUT: Parsing Engine RP Interface
Watchdog Timeout
```

Explanation   This message indicates that the DFC WAN Line Card parsing engine has detected an RP interface Watchdog Timeout. The RP Interface process has not relinquished the processor for the watchdog timeout period. The parsing engine continues to process data from the interfaces if possible.

Recommended Action   If traffic has resumed, no action is required. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

HW_VPN Messages

Error Message

```
%HW_VPN-1-BADMEMSIZE: %s: Invalid Amount of RAM for PA ID, memsize = 0x%x
```

Explanation   The Power On Self Test (POST) reported an incorrect memory size.

Recommended Action   The EAIM must be replaced.

Error Message

```
%HW_VPN-1-BADTYPE: This Encryption AIM type not supported on this router platform
```

Explanation   You have installed an encryption AIM designed for one particular type of router platform (e.g. C2600) on another router platform (e.g. C3620). Different Encryption AIMs are supported by each router platform.

Recommended Action   The Encryption AIM must be removed and one compatible with your router must be installed in its place.

Error Message

```
%HW_VPN-1-BUSY: Encryption AIM busy
```

Explanation   You have entered a command which involves an Encryption AIM, but the Encryption AIM is busy executing another command.

Recommended Action   Wait until the present command has completed. If the present command doesn't seem to complete in a reasonable amount of time, then the Encryption AIM is defective and must be replaced.

Error Message

```
%HW_VPN-1-CMDERR: %s: Command 0x%x failed with status 0x%x
```

Explanation A command was sent to the Encryption AIM, and it responded that the command had an error. The details of the failure depend upon the circumstances, but in all likelihood the Encryption AIM is faulty and should be replaced.

Recommended Action Make a note of the error message and contact a Cisco representative. The EAIM will most likely need to be replaced.

Error Message

```
%HW_VPN-1-CMDTIMEOUT: %s: Timeout on reply to command to Encryption AIM
```

Explanation A command has been sent to the Encryption AIM, and there has not been a reply to the command in a reasonable amount of time. The Encryption AIM is faulty and should be replaced.

Recommended Action Make a note of the error message and contact a Cisco representative. The EAIM will most likely need to be replaced.

Error Message

```
%HW_VPN-1-DEVID: EAIM  : Invalid PCI device ID  : %u
```

Explanation The EAIM device has improperly identified itself on the router bus

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative. The EAIM will need to be replaced.

Error Message

```
%HW_VPN-1-DEVINIT: EAIM  : Device Initialization failure
```

Explanation The EAIM failed to respond properly to attempts at initialization.

Recommended Action The EAIM must be replaced.

Error Message

```
%HW_VPN-1-ELMERREV: AIM in slot %u not supported by this HW revision.
```

Explanation The revision level of the C2600 'Elmer' PLD does not support encryption AIM. The PLD needs to be reprogrammed.

Recommended Action The C2600 'Elmer' PLD needs to be reprogrammed to a later revision. Refer to CCO Release Notes for the C2600 and Encryption AIM for an explanation of how to reprogram the PLD.

Error Message

```
%HW_VPN-1-HELLOERR: %s: EAIM responded incorrectly to hello: received 0x%x
expected 0x%x
```

Explanation A command was sent to the Encryption AIM, and it was expected to echo back the data that was sent to it. Instead of receiving the expected data, the indicated data was received instead.

Recommended Action Make a note of the error message and contact a Cisco representative. The EAIM will most likely need to be replaced.

Error Message

```
%HW_VPN-1-HPRXERR: %s: Packet Encryption/Decryption error, status=%u
```

Explanation An unexpected error occurred during the encryption and/or decryption of a packet.

Recommended Action This message can occur occasionally during normal operation of the system. It may occur during the transition to a new session key for a Security Association. In such cases, it may be ignored. However, if it happens frequently, or is associated with traffic disruption, then make a note of the status value and contact a Cisco representative. The EAIM will most likely need to be replaced.

Error Message

```
%HW_VPN-1-INITFAIL: EAIM  : Initialization failed at %s
```

Explanation The EAIM device would not reset properly. Indicative of a hardware failure.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative. The EAIM will need to be replaced. %HW_VPN-1-LPRXERR : %s: Key management error, cmd=0x%x status=0x%x

Explanation An unexpected error occurred during the execution of a key management command by the EAIM.

Recommended Action Make a note of the status value and contact a Cisco representative. The EAIM will most likely need to be replaced.

Error Message

```
%HW_VPN-1-LPRXERR: [chars]: Command Error IPSEC cmd=[chars][[hex]] Uproc
cmd=[chars][[dec]] status=[chars][[hex]]
```

Explanation An error has occurred during the execution of a key management command by the EAIM.

Recommended Action The EAIM may require replacement. Make a note of the status value, and contact your Cisco technical support representative.

Error Message

%HW_VPN-1-NOHW: Encryption AIM not present in system

Explanation You have entered a command which involves an Encryption AIM, but no encryption AIM is present in the system.

Recommended Action Don't enter encryption AIM commands unless an Encryption AIM is present. If an encryption AIM is installed, then it is defective and must be replaced.

Error Message

%HW_VPN-1-POSTFAIL: %s: Power On Self Test failed, alert status = 0x%x

Explanation The Power On Self Test (POST) for the EAIM failed.

Recommended Action The EAIM must be replaced.

Error Message

%HW_VPN-1-UNEXPCMD: %s: Invalid command reply: expected 0x%x received 0x%s

Explanation A command was sent to the Encryption AIM, and it's replay contained an unexpected reply code. The details of the failure depend upon the circumstances, but in all likelihood the Encryption AIM is faulty and should be replaced.

Recommended Action Make a note of the error message and contact a Cisco representative. The EAIM will most likely need to be replaced.

Error Message

%HW_VPN-6-DISABLED: %s: disabled

Explanation The EAIM has been disabled

Recommended Action The EAIM will need to be replaced.

Error Message

%HW_VPN-6-MULTDEV: Cannot support more than one Encryption AIMs

Explanation A second Encryption AIM was discovered present in the system. The Encryption AIM software only supports a single Encryption AIM. All other Encryption AIMs installed will be ignored.

Recommended Action Remove one of the Encryption AIMs installed in your system.

Error Message

%HW_VPN-6-STARTUP: %s: starting up

Explanation The specified EAIM has initialized successfully.

Recommended Action This is an informational message only. It occurs in normal operation.

I82541 Messages

Error Message

`%I82541-1-BAD_IDB: Invalid Interface Descriptor Block`

Explanation   The driver tried to fetch the interface's IDB and failed.

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

Error Message

`%I82541-1-BAD_MEDIA: Unknown media-type in subblock`

Explanation   The media-type specified in the driver subblock is invalid.

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

Error Message

`%I82541-1-BAD_PARTICLE: Problem getting particle size`

Explanation   The driver was unable to get the particle size for this interface.

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

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

Error Message

```
%I82541-1-BAD_PLUGIN: Plugin function table incomplete or missing
```

Explanation The driver could not access the PA's specific function table.

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

Error Message

```
%I82541-1-BAD_POOL: Could not init buffer pools
```

Explanation The driver failed to get a pool of buffers from IOS.

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

Error Message

```
%I82541-1-BAD_SB_NOMEM: [chars] - Cannot create IDB subblock due to insufficient
memory
```

Explanation There was insufficient system memory to create the subblock.

Recommended Action The router requires more main memory. Copy the message exactly as it appears on the console or in the system log. Enter the show tech-support command to gather data that may help identify the nature of the error. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance,

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

Error Message

%I82541-1-BAD_STRUCT: Could not initialize structure

Explanation   The driver failed to initialize a structure.

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

Error Message

%I82541-1-BAD_SUBBLOCK: [chars] - Could not install or use i82541 IDB subblock

Explanation   An internal IOS error has prevented the IDB subblock from being installed or used.

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

Error Message

%I82541-1-IDBTYPE_UNK: Unknown IDBTYPE while starting i82541

Explanation   The IDBTYPE in the interface's instance structure is undefined for this driver.

Recommended Action   This is a software bug. Copy the message exactly as it appears on the console
or in the system log. Enter the show tech-support command to gather data that may help identify the
nature of the error. Research and attempt to resolve the issue using the tools and utilities provided
at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Search for resolved software issues using the Bug Toolkit at

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

Error Message

%I82541-1-MODE_INVALID: Unknown or invalid chip mode (MII/TBI)

Explanation The driver subblock contains an invalid or undefined chip operating mode (MII or TBI mode).

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

Error Message

%I82541-1-RESET: MAC Still in Reset

Explanation An attempt was made to access the MAC while it was in reset.

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

Error Message

%I82541-2-NOISL: Interface [chars] does not support ISL

Explanation ISL is not supported on the specified interface's hardware.

Recommended Action No action is required.

Error Message

%I82541-3-EEPROMACCESS: Error accessing EEPROM

Explanation   There is a problem accessing the EEPROM. This will prevent reading or writing to the EEPROM.

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

Error Message

%I82541-3-INITPROC: Error while creating port init process [dec]

Explanation   The i82541 ports cannot be initialized because the indicated initialization process was not created .

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

Error Message

%I82541-3-NOEEPROM: No EEPROM Found

Explanation   There is no EEPROM found for the port. This could be a hardware issue.

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

Error Message

```
%I82541-3-NOTI82541: Bay [int], device number [int]: unknown device ([hex])
```

Explanation For some reason, the PA does not contain an Intel 82541 controller chip.

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

Error Message

```
%I82541-3-PHY_REG: [chars]: Error accessing a PHY register - [hex]
```

Explanation After accessing (read/write) a PHY register, the ready bit was not set.

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

Error Message

```
%I82541-3-PHY_REG_MAX: [chars]: Error accessing PHY register, Address [hex] out of bounds
```

Explanation The address is out of bounds. If a high value register is accessed, make sure that the correct page on the PHY is selected and that only the offset in the page is passed.

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

Error Message

```
%I82541-3-PORTINIT: [chars]: Error initializing port
```

Explanation Error in intializing an i82541 port. Check for any other error messages that may have occurred before this error message.

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

Error Message

```
%I82541-3-TOOBIG: [chars], packet too big ([dec]), src [enet], dst [enet]
```

Explanation The interface detected a packet that is larger than is defined by MTU.

Recommended Action Check the other station's MTU setting. No action is required.

Error Message

```
%I82541-3-UNKNOWN_PHY: Interface [chars] has an unsupported PHY
```

Explanation The specified interface has an unsupported PHY chip installed.

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

Error Message

```
%I82541-3-VLAN_ID: [chars]: Vlan ID out of range
```

Explanation The VLAN ID is not within the permissible limits.

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

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

Error Message

%I82541-3-WATCHQUEUE: Error watching the queue by port init process

Explanation If the port init processes cannot watch their respective watched queues, port
initialization will fail.

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

Error Message

%I82541-4-AUTO_NEGO_MAC: Auto Negotiation: Error setting speed of MAC on port
[chars]. Forcing [dec] Mbps

Explanation The speed of PHY and MAC should be set during autonegotiation, but the speed of the
MAC was not set as part of autonegotiation. The MAC is forced to the indicated speed.

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

Error Message

%I82543-1-BAD_IDB: Invalid Interface Descriptor Block

Explanation The driver could not retrieve the IDB of the interface. This condition indicates a
software error.

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

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

Error Message

%I82543-1-BAD_MEDIA: Unknown media-type in subblock

Explanation The media type specified in the driver subblock is invalid. This condition indicates a software error.

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

Error Message

%I82543-1-BAD_PARTICLE: Problem getting particle size

Explanation The driver was unable to retrieve the particle size for this interface. This condition indicates a software error.

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

Error Message

```
%I82543-1-BAD_PLUGIN: Plugin function table incomplete or missing
```

Explanation The driver could not access the specific function table of the PA. This condition indicates a software error.

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

Error Message

```
%I82543-1-BAD_POOL: Could not init buffer pools
```

Explanation The driver failed to retrieve a pool of buffers from the software. This condition indicates a software error.

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

Error Message

```
%I82543-1-BAD_SB_NOMEM: [chars] - Cannot create IDB subblock due to insufficient
memory
```

Explanation Available system memory was insufficient to create the subblock.

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

Error Message

%I82543-1-BAD_STRUCT: Could not initialize structure

Explanation   The driver failed to initialize a structure. This condition indicates a software error.

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

Error Message

%I82543-1-BAD_SUBBLOCK: [chars] - Could not install or use i82543 IDB subblock

Explanation   An internal Cisco IOS software error prevented the IDB subblock from being installed or used.

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

Error Message

%I82543-1-DISCOVER: Only found %d interfaces on bay %d, shutting down bay

Explanation   Possible hardware error resulted in too few interfaces discovered

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

Error Message

`%I82543-1-IDBTYPE_UNK: Unknown IDBTYPE while starting i82543`

Explanation   The IDB type in the instance structure of the interface is undefined for this driver. This condition indicates a software error.

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

Error Message

`%I82543-1-INITFAIL_NOMEM: %s, initialization failed, no buffer memory`

Explanation   The Ethernet port initialization failed due to insufficient memory

Recommended Action   The router requires more packet memory. Consider upgrading. If the error 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%I82543-1-MODE_INVALID: Unknown or invalid chip mode (MII/TBI)`

Explanation   The driver subblock contains an unknown or invalid MAC operating mode. This condition indicates a software error.

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

Error Message

```
%I82543-1-RESET: MAC Still in Reset
```

Explanation An attempt was made to access the MAC while it was in reset mode.

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

Error Message

```
%I82543-2-NOISL: Interface %s does not support ISL
```

Explanation ISL is not supported on the specified interface's hardware.

Recommended Action No action is required.

Error Message

```
%I82543-3-DUPLICATE_GBIC: GBIC interface [chars] has the same serial number as
another GBIC interface
```

Explanation The specified interface has a GBIC whose serial number duplicates that of some other GBIC in the chassis.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%I82543-3-ERRINT: %s, error interrupt, csr_STATUS=%#x
```

Explanation The i82543 controller has signalled an error condition.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%I82543-3-NOTI82543: Bay %u, device number %u: unknown device (%#x)
```

Explanation Somehow the PA does not contain an Intel 82543 controller chip

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

Error Message

```
%I82543-3-TOOBIG: [chars], packet too big ([dec]), src [enet], dst [enet]
```

Explanation The interface has detected a packet that is larger than the predefined MTU size.

Recommended Action Check the MTU setting of the other station.

Error Message

```
%I82543-3-UNKNOWN_GBIC: Identification check failed for GBIC interface [chars]
```

Explanation The specified interface has an unsupported GBIC inserted into the module.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the show tech-support command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the show tech-support command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%I82543-3-UNKNOWN_PHY: Interface [chars] has an unsupported PHY
```

Explanation The specified interface has an unsupported PHY chip on the board.

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

Error Message

```
%I82543-5-LOSTCARR: [chars] cable/transceiver problem?
```

Explanation   The Ethernet port has detected a link failure. The Ethernet port is no longer receiving signals from the LAN. This condition can be caused by disconnected Ethernet cabling, a transceiver (GBIC) failure, or a remote end that has been shut down.

Recommended Action   Check your Ethernet wiring and port adapter. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%I82543-5-WATCHDOG: I82543([dec]/[dec]), enormous packet received
```

Explanation   Unavailable.

Recommended Action   Unavailable

I82544 Messages

The following are I82544 Fast Ethernet controller messages.

Error Message

```
%I82544-3-BAD_POOL: Could not init buffer pools
```

Explanation   The driver could not obtain a pool of buffers from the Cisco IOS 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/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%I82544-3-EEPROM: EEPROM access failed
```

Explanation   The driver could not perform a read or write operation to the EEPROM for the i82544 device.

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

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

Error Message

%I82544-3-INITFAIL_NOMEM: [chars], initialization failed, no memory

Explanation The Ethernet port could not be initialized because insufficient system memory was available.

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

Error Message

%I82544-3-NOTI82544: Bay [dec] device ID seen as [hex], expected [hex]

Explanation The Fast Ethernet driver failed to initialize.

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

Error Message

%I82544-3-NOTI82544PHY: Bay [dec] PHY device ID seen as [hex], expected [hex]

Explanation The Fast Ethernet driver failed to initialize.

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

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

Error Message

```
%I82544-3-TOOBIG: [chars], packet too big ([dec]), from [enet]
```

Explanation   The interface has detected a packet larger than the configured MTU size. This condition
indicates a software error.

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

I82559FE Messages

The following are Intel 82559 Fast Ethernet controller messages.

Error Message

```
%I82545-1-BAD_IDB: Invalid Interface Descriptor Block
```

Explanation   The driver tried to fetch the interface's IDB and failed.

Recommended Action   Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

`%I82545-1-BAD_MEDIA: Unknown media-type in subblock`

Explanation The media-type specified in the driver subblock is invalid.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%I82545-1-BAD_PARTICLE: Problem getting particle size`

Explanation The driver was unable to get the particle size for this interface.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%I82545-1-BAD_PLUGIN: Plugin function table incomplete or missing`

Explanation The driver could not access the PA's specific function table.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%I82545-1-BAD_POOL: Could not init buffer pools`

Explanation The driver failed to get a pool of buffers from IOS.

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

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

Error Message

%I82545-1-BAD_SB_NOMEM: [chars] - Cannot create IDB subblock due to insufficient
memory

Explanation   There was insuffcient system memory to create the subblock.

Recommended Action   The router requires more main memory. Copy the message exactly as it appears
on the console or in the system log. Research and attempt to resolve the error using the Output
Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a
search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still
require assistance, open a case with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

%I82545-1-BAD_STRUCT: Could not initialize structure

Explanation   The driver failed to initialize a structure.

Recommended Action   Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

%I82545-1-BAD_SUBBLOCK: [chars] - Could not install or use i82545 IDB subblock

Explanation   An internal IOS error prevented the IDB subblock from being installed or used.

Recommended Action   Copy the message exactly as it appears on the console or in the system log.
Enter the **show tech-support** command to gather data that might help identify the nature of the
message. Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

%I82545-1-DISCOVER: Only found [dec] interfaces on bay [dec], shutting down bay

Explanation Possible hardware error resulted in too few interfaces being discovered.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%I82545-1-IDBTYPE_UNK: Unknown IDBTYPE while starting i82545

Explanation The IDBTYPE in the interface's instance structure is undefined for this driver.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%I82545-1-INITFAIL_NOMEM: [chars], initialization failed, no buffer memory

Explanation The Ethernet port initialization failed due to insufficient memory.

Recommended Action The router requires more packet memory - consider upgrade.If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%I82545-1-MODE_INVALID: Unknown or invalid chip mode (MII/TBI)
```

Explanation The driver subblock contains an invalid or undefined chip operating mode (MII or TBI mode).

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%I82545-1-RESET: MAC Still in Reset
```

Explanation An attempt was made to access the MAC while it was in reset.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%I82545-2-NOISL: Interface [chars] does not support ISL
```

Explanation ISL is not supported on the specified interface's hardware.

Recommended Action No action is required.

Error Message

```
%I82545-3-BAD_GBIC_EEPROM: [chars] - GBIC contains a bad EEPROM
```

Explanation Interface contains a GBIC with a bad EEPROM. This causes the link to be down.

Recommended Action Ensure the GBIC type is compatible with the interface. Verify that the GBIC was obtained from Cisco or a supported vendor.

Error Message

```
%I82545-3-DUPLICATE_GBIC: GBIC interface [chars] has the same serial number as
another GBIC interface
```

Explanation The specified interface has an GBIC whose serial number matches that of some other GBIC in the chassis.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%I82545-3-ERRINT: [chars], error interrupt, csr_STATUS=[hex]
```

Explanation The i82545 controller has signalled an error condition.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%I82545-3-NOTI82545: Bay [int], device number [int]: unknown device ([hex])
```

Explanation Somehow the PA does not contain an Intel 82545 controller chip.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%I82545-3-TOOBIG: [chars], packet too big ([dec]), src [enet], dst [enet]
```

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

Recommended Action   Check the other station's MTU setting. No action is required.

Error Message

```
%I82545-3-UNKNOWN_GBIC: Identification check failed for GBIC interface [chars]
```

Explanation   The specified interface has an unsupported GBIC inserted into the module.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%I82545-3-UNKNOWN_PHY: Interface [chars] has an unsupported PHY
```

Explanation   The specified interface has an unsupported PHY chip on the board.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

I82559FE Messages

Error Message

```
%I82559FE-1-INITFAIL: NM slot [dec]: PCI device [dec] initialization failed
```

Explanation   I82559 Fast Ethernet controller initialization has failed.

Recommended Action   Power down the system, reseat the interface card, and reboot. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%I82559FE-1-NOT82559: NM slot [dec]: PCI device ID seen as [hex], expected [hex]
```

Explanation The Cisco IOS software could not recognize the I82559 Fast Ethernet controller.

Recommended Action Power down, reseat the interface card, and reboot the system.

Error Message

```
%I82559FE-3-BUSY: NM slot [dec]: I82559FE not responding
```

Explanation The I82559 Fast Ethernet controller is not responding to commands.

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

Error Message

```
%I82559FE-3-PHYBUSY: NM slot [dec]: I82559FE PHY not responding to [chars]
```

Explanation The PHY device on the I82559 Fast Ethernet controller is not responding.

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

Error Message

```
%I82559FE-3-RBD_ERROR: Interface [chars]: I82559FE unexpected RBD error
```

Explanation The I82559 Fast Ethernet driver did not encounter the EOF flag in the RBD ring.

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

Error Message

```
%I82559FE-3-RX_INIT_FAIL: Interface [chars]: I82559FE Rx Init Failure error:
[chars]
```

Explanation The I82559 Fast Ethernet driver could not successfully complete the RX initialization.

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

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

Error Message

`%I82559FE-3-UNEXPECTEDINTR: NM slot [dec]: Unexpected I82559FE [chars] interrupt`

Explanation The I82559 Fast Ethernet controller issued an unexpected interrupt.

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

Error Message

`%IAD2420_VOICEPORT-1-PORT_OVERHEAT: Over heat has been detected on Analog FXS voice port 1/[dec], it is in current limitting mode now`

Explanation The analog voice port FXS is over heating.

Recommended Action Ensure that the Cisco C2420 router has good ventilation. If overheating problems occurs frequently on that voice port, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%IBDINDEX_SYNC-3-IBDINDEX_ENTRY_MISMATCH: Interface index mismatched its active table entry [chars]`

Explanation An interface index was found which did not match the active interface index table entry with the corresponding synchronization key due to an internal software error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

IBM2692 Messages

Error Message

%IBM2692-1-DISCOVER: Only found %d interfaces on bay %d, shutting down bay

Explanation One of the interface controller devices on the module did not initialize properly.

Recommended Action Power down, reinsert the network module, and reboot. If the message recurs, call your technical support representative for assistance.

Error Message

%IBM2692-1-LL_QUEUE_OVERFLOW: IBM2692 (%d/%d), LL queue overflow.

Explanation A packet buffer queue overflowed. This message indicates a packet was lost, probably due to traffic congestion.

Recommended Action A small number of queue overflows might not be a cause for concern. Reducing the load on the router or installing a higher-performance router should alleviate this problem.

Error Message

%IBM2692-1-NOPCIMEMORY: %s %s creation failed

Explanation The router or access server could not allocate memory for the descriptors.

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

Error Message

%IBM2692-1-OLDREV: Bay %d port adapter requires Rev 2 CPU

Explanation The Token Ring PCI Port Adapter driver depends on capabilities of the Revision 2 processor.

Recommended Action Upgrade the processor to Revision 2.

ICC Messages

Error Message

%ICC-2-JOIN: ICC mcast joining failed member to group with ipc error

Explanation The ICC is not able to join a member for the MCAST 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. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information. Attach the following
information to your case in non-zipped, plain-text (.txt) format: the output of the **show icc mcast
status** command obtained from the RP and your pertinent troubleshooting logs.

Error Message

%ICC-2-NOMEM: No memory available for %s

Explanation   The ICC subsystem could not obtain the memory it needed.

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

Error Message

%ICC-2-OPEN: ICC Create Session Failed for card Queue

Explanation   ICC was not able to create a session for the destination seat

Recommended Action   Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information. Attach the following
information to your case in non-zipped, plain-text (.txt) format: the output of the **show oir debug
swover_global_mask** command obtained from the SP and your pertinent troubleshooting logs.

Error Message

%ICC-4-COMM: Communication failure occurred while %s

Explanation   A communication failure has occurred between this card and another card 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/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

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

Error Message

%ICC-4-CONSISTENCY: Internal consistency check: %s

Explanation An internal inconsistency was found in some ICC data structures.

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

Error Message

%ICC-4-HEARTBEAT: Card %d failed to respond to heartbeat

Explanation A communication failure has occurred between the primary and the specified line card.

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

Error Message

%ICC-5-HUGE_BUFFER: Class [[chars]] with Request id [dec] requested a huge buffer
of Size [dec].

Explanation Huge packet requests would deplete the memory at the linecards.

Recommended Action The ICC client is attempting to request huge packet buffer. Enter the **show icc
internal** command to get get the traceback. Copy the message exactly as it appears on the console
or in the system log. Research and attempt to resolve the issue using the tools and utilities provided
at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

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

Error Message

%ICC-5-WATERMARK: [dec] pkts for class [chars] are waiting to be processed

Explanation The processor received packets for the class and those packets are waiting to be
processed.

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

ICE Messages

The following are the ICE messages.

Error Message

%ICE-3-BADINDEX: bad index value: [chars] [dec]

Explanation An index value is outside the array limits.

Recommended Action Refer the Bug Navigator at www.cisco.com to see if this condition has been
previously reported and resolved in a later release. If not, copy the message exactly as it appears on
the console or in the system log. Research and attempt to resolve the issue using the tools and
utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will
supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information. Attach the following
information to your case in non-zipped, plain-text (.txt) format: the output of the **show version** and
show running-config commands and your pertinent troubleshooting logs.

Error Message

```
%ICE-3-BADTYPE: [chars] [dec]
```

Explanation An illegal type has been encountered.

Recommended Action Refer the Bug Navigator at www.cisco.com to see if this condition has been previously reported and resolved in a later release. If not, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in non-zipped, plain-text (.txt) format: the output of the **show version** and **show running-config** commands and your pertinent troubleshooting logs.

Error Message

```
%ICE-3-DEFVEC: default vectors used: [chars]
```

Explanation A default vector has been used.

Recommended Action Refer the Bug Navigator at www.cisco.com to see if this condition has been previously reported and resolved in a later release. If not, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in non-zipped, plain-text (.txt) format: the output of the **show version** and **show running-config** commands and your pertinent troubleshooting logs.

Error Message

```
%ICE-3-MSG_ERR: %s
```

Error Message

```
%ICE-3-NULLPTR: [chars] [hex]
```

Explanation A NULL pointer has been encountered.

Recommended Action Refer the Bug Navigator at www.cisco.com to see if this condition has been previously reported and resolved in a later release. If not, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support

representative and provide the representative with the gathered information. Attach the following information to your case in non-zipped, plain-text (.txt) format: the output of the **show ip sla config** command and your pertinent troubleshooting logs.

Error Message

```
%ICE-3-REFCOUNT: bad refcnt: [chars] [hex]
```

Explanation A bad reference count has been encountered.

Recommended Action Refer to the Bug Navigator at www.cisco.com to see if this condition has been previously reported and resolved in a later release. If not, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in non-zipped, plain-text (.txt) format: the output of the **show version** and **show running-config** commands and your pertinent troubleshooting logs.

Error Message

```
%ICE-3-UNINIT: [chars] [int]
```

Explanation An uninitialized data structure has been encountered.

Explanation Refer to the Bug Navigator at www.cisco.com to see if this condition has been previously reported and resolved in a later release. If not, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support

representative and provide the representative with the gathered information. Attach the following information to your case in non-zipped, plain-text (.txt) format: the output of the **show version** and **show running-config** commands and your pertinent troubleshooting logs. IDMNGR Messages

Error Message

```
%ICE-6-MSG_INF: %s
```

Explanation Program information

Error Message

```
%ICE-7-MSG_DBG: %s
```

Explanation Debug Messages

IDBINDEX_SYNC Messages

Error Message

```
%IDBINDEX_SYNC-3-IDBINDEX_ASSIGN: Failed to assign an index to IDB type %d, for
interface %s (rc=%d)
```

Explanation An IF-Index can not be allocated for this interface due to an internal software error. This is an unrecoverable error that results in this interface not being usable for traffic.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. IDBINDEX_SYNC_Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IDBINDEX_SYNC-3-IDBINDEX_ENTRY_ADD: Cannot add entry to IDB index table:`
`'[chars]', [dec]`

Explanation A table entry has not been added to the IDB index table because of an internal software error.

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

Error Message

`%IDBINDEX_SYNC-3-IDBINDEX_ENTRY_DEL: Cannot delete entry from interface index`
`table: '[chars]', [dec]`

Explanation An interface index table entry is not deleted from the interface index table due to an internal software error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information. Provide the output of the show running-config, show logging, show monitor event-trace ifnum merged all, show ifnum list, show ifnum statistics, show cef idb and show cef interface commands. Also provide the sequence of commands that was used to reproduce the error.

Error Message

`%IDBINDEX_SYNC-3-IDBINDEX_ENTRY_LOOKUP: Cannot find IDB index table entry:`
`'[chars]', [dec]`

Explanation The IDB index number was not found in the IDB index table for the IDB specified in the error message. This condition might have been caused by improper synchronization of the IDB index number by the primary processor card.

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

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

Error Message

```
%IDBINDEX_SYNC-3-IDBINDEX_ENTRY_MISMATCH: An interface index mismatched its
active table entry: %s, type %d, table index=%d, interface index=%d
```

Explanation An interface index was found which didn't match the active interface index table entry with the corresponding sync key due to an internal software error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. IDBINDEX_SYNC_Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IDBINDEX_SYNC-3-IDBINDEX_ENTRY_SET: Cannot set entry to interface index table:
'[chars]', [dec]
```

Explanation An interface index table entry is not set to the interface index table due to an internal software error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information. Provide the output of the show running-config, show logging, show monitor event-trace ifnum merged all, show ifnum list, show ifnum statistics, show cef idb and show cef interface commands. Also provide the sequence of commands that was used to reproduce the error.

Error Message

`%IDBINDEX_SYNC-3-IDBINDEX_INITKEY: Cannot initialize IDB index table lookup key: '[chars]', [dec]`

Explanation An internal software error has occurred.

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

Error Message

`%IDBINDEX_SYNC-3-IDBINDEX_LINK: Driver for IDB type '%d' changed the Identity of interface %s without deleting the old Identity first (rc=%d)`

Explanation The IF-Index Table can not be updated with the new Identity provided for this interface due to an internal software error. Most likely the old Identity was not deleted first by the driver or that the driver accidently changed the Identity.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. IDBINDEX_SYNC_Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IDBINDEX_SYNC-3-IDBINDEX_RETRIEVE: Cannot retrieve if-index for this interface:
%s, %d, %s %s
```

Explanation The interface index number was not found in the interface index table for the interface specified in the error message. This condition might have been caused by the interface index number not being properly synchronized by the primary processor card.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. IDBINDEX_SYNC_Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IDBINDEX_SYNC-3-INIT_ERR: %s
```

Explanation The interface index sync ISSU client has an initialization 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. IDBINDEX_SYNC_Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IDBINDEX_SYNC-3-IPC_ERR: %s: %s.`

Explanation The interface index sync IPC session has 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. IDBINDEX_SYNC_Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IDBINDEX_SYNC-3-ISSU_ERR: %s%s, rc=%d`

Explanation The interface index sync ISSU client has 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. IDBINDEX_SYNC_Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IDBINDEX_SYNC-3-RF_ERR: %s %d.
```

Explanation The interface index sync RF client has an error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. IDBINDEX_SYNC_Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IDBINDEX_SYNC-3-TRANSFORM: Require IF-Index ISSU transformation function %s %s
```

Explanation IF-Index Sync has identified a missing ISSU transformation function which may lead to unpredictable results. This must be resolved before the code is released.

Recommended Action Contact IF-Index Sync development team with the contents of the configuration and error message so that the driver may be identified.

Error Message

```
%IDBINDEX_SYNC-3-UNKNOWN_TYPE: IDB type is unknown and cannot be synced:
'[chars]', [dec]
```

Explanation An internal software error has occurred.

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

Error Message

```
%IDBINDEX_SYNC-3-VALIDATE: Cannot validate if-index for this interface: %s, %d,
%s %s
```

Explanation The identity of this interface could not be validated against the stored identity within the IDB Index table. This condition is likely to have occured due to the identity of the IDB changing without first explicitly unlinking the previous identity.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. IDBINDEX_SYNC_Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IDBINDEX_SYNC-4-RESERVE: Failed to lookup existing ifindex for an interface on
the Standby, allocating a new ifindex from the Active (ifindex=%d, idbtype=%s)
```

Explanation Encountered a lookup failure for an interface on the Standby. An attempt has been amde to resolve the issue by reserving a possibly new ifindex on the Active. If this situation was encountered due to a defect in the key encoding then traffic may stop on this interface should the system switchover.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. IDBINDEX_SYNC_Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IDBINDEX_SYNC-4-TRUNCATE: Overflow in %s when encoding interface sync key, got
%d maximum is %d
```

Explanation When creating a unique sync key to represent an interface it has been detected that one of the attributes making up the key was truncated to fit in the allocated space in the key. This may lead to overlapping key allocations which would cause an error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. IDBINDEX_SYNC_Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IDBINDEX_SYNC_KEY-3-UNKNOWN_TYPE: Interface type is unknown and cannot be synced:
%s, %d
```

Explanation An internal software error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

IDBMAN Messages

Error Message

```
%IDBMAN-3-AGGPORTMISMATCH: [chars]: [chars]([dec] / [dec]) does match internal
slot/port state [chars]([dec] / [dec])
```

Explanation An internal error has caused the software to use an invalid aggregate 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/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%IDBMAN-3-DELETEDAGGPORT: [chars]([dec] / [dec]) Group [dec] has been deleted, but
is being reused.
```

Explanation An internal error has caused a deleted interface to be reused for a new aggregate 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/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%IDBMAN-3-INVALIDAGGPORTBANDWIDTH: [chars]([dec] / [dec]) has an invalid
bandwidth value of [dec]
```

Explanation An internal error has caused an invalid bandwidth to be used for an aggregate 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/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

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

Error Message

%IDBMAN-3-INVALIDPORT: [chars]: trying to use invalid port number [dec] (Max [dec])

Explanation An internal error has caused the software to use an invalid port number.

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

Error Message

%IDBMAN-3-INVALIDVLAN: [chars]: trying to use invalid Vlan [dec]

Explanation An internal error has caused the software to use an invalid VLAN.

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

Error Message

%IDBMAN-3-NOTANAGGPORT: [chars]([dec] / [dec]) is not an aggregate port

Explanation An internal error has caused an interface that is not an aggregate port to be used for aggregate port operations.

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

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

Error Message

```
%IDBMAN-3-PORTNOTINAGGPORT: [chars]([dec] / [dec]) is not present in Aggport
[chars]([dec] / [dec])
```

Explanation   An internal error has caused an invalid port to be referred to as part of an aggregate 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/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%IDBMAN-3-VLANINUSE: [chars]: Vlan [dec] is in use by [chars]
```

Explanation   Each Layer 3 interface has a VLAN associated with it. This message indicates that the VLAN associated with the interface is being unexpectedly used by another Layer 3 interface.

Recommended Action   No action is required.

Error Message

```
%IDBMAN-3-VLANNOTSET: [chars]: Vlan [dec] not set since it already has Vlan [dec]
```

Explanation   An internal error caused an interface to fail to set a VLAN to the requested value.

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

Error Message

```
%IDBMAN-4-ACTIVEPORTSINAGGPORT: [chars]( [dec] / [dec] ) has [dec] active ports,
but is being removed
```

Explanation An internal error caused an aggregate port with active ports to be removed.

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

Error Message

```
%IDBMAN-4-CONFIG_WRITE_FAIL: FFailed to generate confgiruation for interface %s
```

Explanation Failed to generate configuration for the specified interface because of problem with the file system. If this happens the active and standby supervisor will have configuration mismatch. The standby supervisor is reloaded to recover from the problem.

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

Error Message

```
%IDBMAN-4-REMOVED_NONDEFAULT_CONFIG: Removed non default configuration for
interfaces in slot %d
```

Explanation In SSO mode, the non-default configuration for any removed linecard is not synced to the standby during the bulk sync, and it is removed from the configuration to avoid a config mismatch between active and standby supervisors.

Recommended Action No action is required.

Error Message

```
%IDBMAN-4-SVI_LIMIT: Switch virtual interface count reached the recommended limit
of [dec]
```

Explanation   The counter has reached the limit for the recommended number of SVIs.

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

Error Message

```
%IDBMAN-6-VLANMAPPED: Vlan [dec] is mapped to [chars]
```

Explanation   This informational message indicates that the given VLAN is mapped to the given interface.

Recommended Action   No action is required.

IDB_IDENTITY Messages

Error Message

```
%IDB_IDENTITY-3-MALLOC: Memory allocation failure for HWIDB type %d
```

Explanation   A memory allocation failure occured when trying to allocate the identity for this HWIDB. This HWIDB will not be allocated an IF Index which will prevent it from being used for forwarding data.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

IDCONF Messages

Error Message

`%IDCONF-4-HTTP_ERROR: IDCONF  : HTTP returned error [dec] when registering`

Explanation IDCONF received an error message from HTTP during initialization.

Recommended Action This message indicates that IDCONF was not able to successfully register with the HTTP server.

Error Message

`%IDCONF-4-PARSE_ERROR: IDCONF  : Parse error while parsing xml parser`

Explanation Intrusion Detection Configuration has received an error while parsing an XML configuration document.

Recommended Action Check the XML document and make sure that it complies with the IDCONF data format standard.

IDMGR Messages

Error Message

`%IDMGR-3-ID_MANAGER_INTERNAL_ERROR: %s`

Explanation Internal Error occured with ID 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IDMGR-3-INTERRUPT: %s`

Explanation An id_get attempted at interrupt level.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

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

Error Message

```
%IDMGR-3-INVALID_ID: bad id in %s (id: 0x%lX)
```

Explanation An ID Manager error occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

```
%IDMGR-3-INVALID_ID_TABLE_SIZE: bad new ID table size
```

Explanation An invalid request has been made to the ID manager for a new table.

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

Error Message

```
%IDMGR-3-MALLOC_FAILURE: %s
```

Explanation A malloc failure occured in ID 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/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

`%IDMNGR-3-CORECTXALLOC: Error: Unable to handle request [hex]`

    Explanation   Unable to handle a client request.

    Recommended Action   Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IDMNGR-3-EMPTYREQ: Error: empty request received`

    Explanation   Unable to handle a client request/event.

    Recommended Action   Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IDMNGR-3-INVALIDARG: Error: Argument [chars] with NIL value`

    Explanation   Internal software error.

    Recommended Action   Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IDMNGR-3-INVALIDEVENT: Error: Invalid process event received [dec]`

Explanation Internal process error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IDMNGR-3-INVALIDREQUEST: Error: Invalid request type received [dec]`

Explanation Unable to handle a client request.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IDMNGR-3-NOPROCESS: Error: NO idmgr process`

Explanation Internal software error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IDMNGR-3-PROCNAME: Error: Unable to get idmgr process name for request [hex]`

Explanation   Unable to handle a client request/event.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IDMNGR-7-ALLOCFAIL: Error: Failed to allocate memory for [chars]`

Explanation   Internal software error.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

IDNLD Messages

Error Message

`%IDNLD-6-BAD_FILE_TYPE: NRP2 slot [dec]/[dec] image: [chars] not an NRP2 executable image`

Explanation   The specified image file was not a valid NRP2 executable image.

Recommended Action   Replace the image with a valid NRP2 executable, or configure the NSP to download to a different valid image.

Error Message

`%IDNLD-6-FILERD_FAILED: slot [dec]/[dec] file read error during image download`

Explanation   Unavailable.

Recommended Action   Unavailable.

Error Message

%IDNLD-6-FILESEEK_FAILED: slot [dec]/[dec] file seek error during image download

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

%IDNLD-6-IMAGE_LOADED: NRP2 slot [dec]/[dec] image loading: [chars]

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

%IDNLD-6-NOIMAGE: NRP2 slot [dec]/[dec] image not found: [chars]

Explanation The identified NRP2 is unable to load an image. Probable reasons are that, the specified image is not present or that there is a networking problem.

Recommended Action Reconfigure the hw-module image command to point to a valid image or resolve the networking issue that is causing the error.

Error Message

%IDNLD-6-OPEN_FAILED: NRP2 slot [dec]/[dec] failed to find a valid image

Explanation Unavailable.

Recommended Action Unavailable.

IDPROM Messages

Error Message

%IDPROM-3-CHECKSUM: Corrupt or missing IDPROM Checksum

Explanation The IDPROM of this unit could not be accessed or has been found to be corrupt. The cause could be either a hardware problem or a manufacturing problem.

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

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

Error Message

%IDPROM-4-MAGIC: Corrupt or missing IDPROM Magic number

Explanation   The IDPROM of this unit could not be accessed or has been found to be corrupt. The cause could be either a hardware problem or a manufacturing problem.

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

IDS Messages

Error Message

%IDS-2-DISABLED: [chars] - IDS disabled

Explanation   IDS has been disabled. The message provides more information on the specific cause. IDS will be disabled for a number of reasons, including the following: IDS configuration is removed from all the interfaces on the router, IDS cannot load a signature file, or IDS cannot allocate memory for a critical resource.

Recommended Action   If this was a user-initiated or normal system-initiated operation, no action is required. Otherwise, perform actions to determine the cause of the problem, depending on the message text.

Error Message

%IDS-3-ENGINE_BUILD_FAILED: [chars] - [dec] ms - engine build failed - [chars]

Explanation   One of the engines could not be built after an SDF file was loaded. One message is sent for each engine build failure. The most likely cause of an engine build failure is low memory.

Recommended Action   Increase the amount of memory in the router, or attempt to load the affected SDF file immediately after a reboot once additional system resources are available.

Error Message

%IDS-4-DNS_AUTHORS_REQUEST: Sig:6062 :DNS Authors Request - from [IP_address] to
[IP_address]

Explanation A DNS query type with a text class of CHAOS has been detected that also included a
string of 'Authors.Bind' (case insensitive).

Recommended Action Note the number that appears in the error message text after Sig: and perform
the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig:
in the error message text for more information on the nature of the error and corrective actions to
perform.

Error Message

%IDS-4-DNS_DUMP_REQUEST: Sig:6053 :DNS Request All - from [IP_address] to
[IP_address]

Explanation A DNS request for all records has been made.

Recommended Action Note the number that appears in the error message text after Sig: and perform
the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig:
in the error message text for more information on the nature of the error and corrective actions to
perform.

Error Message

```
%IDS-4-DNS_HINFO_REQUEST: Sig:6050  :DNS HINFO Request - from [IP_address] to
[IP_address]
```

Explanation An attempt has been made to access HINFO records from a DNS server. This DNS information field can be accessed from the network for many valid reasons, such as a search by a system administrator for all systems on the network that are running a particular operating system or an exploratory search by a curious user.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-DNS_INCREMENTAL_ZONE_XFER: Sig:6063  :DNS Incremental Zone Transfer - from
[IP_address] to [IP_address]
```

Explanation A DNS query of type 251 has been detected.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-DNS_IQUERY_OVERFLOW: Sig:6055  :DNS Inverse Query Overflow - from
[IP_address] to [IP_address]
```

Explanation An IQUERY request has arrived with a data section that is larger than the 255-character maximum.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-DNS_NXT_OVERFLOW: Sig:6056  :DNS NXT Overflow - from [IP_address] to
[IP_address]
```

Explanation A DNS server response has been received that contains a long NXT resource. The length of the resource data is greater than 2069 bytes, or the length of the TCP stream containing the NXT resource is greater than 3000 bytes.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-DNS_SIG_OVERFLOW: Sig:6057  :DNS SIG Overflow - from [IP_address] to
[IP_address]
```

Explanation A DNS server response has been received that contains has a long SIG resource. The length of the resource data is greater than 2069 bytes, or the length of the TCP stream containing the SIG resource is greater than 3000 bytes .

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-DNS_VERSION_REQUEST: Sig:6054  :DNS Version Request - from [IP_address] to
[IP_address]
```

Explanation A request has been made for the version of a DNS server.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-DNS_ZONE_XFER_REQUEST: Sig:6051  :DNS Zone Transfer Request - from
[IP_address] to [IP_address]
```

Explanation A normal DNS zone transfer in which the source port is 53 has been requested.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-DNS_ZONE_XFER_REQUEST_HIGH: Sig:6052  :DNS High Zone Transfer Request -
from [IP_address] to [IP_address]
```

Explanation An illegitimate DNS zone transfer in which the source port is not equal to 53 has been requested. This condition is most probably caused by a reconnaissance effort.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

%IDS-4-HTTP_BASIC_AUTH_OVFLOW_SIG: Sig:5055 :HTTP Basic Authentication Overflow
- from [IP_address] to [IP_address]

Explanation A Basic Authentication buffer overflow has occurred. A buffer overflow can occur on vulnerable web servers if a very large username and password combination is used with Basic Authentication.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

%IDS-4-HTTP_CGI_HYLAFAX_SIG: Sig:5035 :HTTP cgi HylaFAX Faxsurvey - from
[IP_address] to [IP_address]

Explanation An attempt has been made to pass commands to the CGI program faxsurvey , which is included with the HylaFAX package from SGI. A problem in the CGI program faxsurvey allows an attacker to execute commands on the host machine. These commands execute at the privilege level of the HTTP server.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-HTTP_ENDYMION_MAILMAN_RMTCMD_SIG: Sig:5116  :Endymion Mailman Remote
Command Execution - from [IP_address] to [IP_address]
```

Explanation A command has been executed remotely using Endymion MailMan. Endymion MailMan uses the insecure Perl function open() , which allows user-supplied input containing shell metacharacters to be executed as shell commands with the privilege level of the CGI script.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-HTTP_EWAVE_SERVLET30_SIG: Sig:5118  :eWave ServletExec 3.0C File Upload -
from [IP_address] to [IP_address]
```

Explanation A file upload using eWave ServletExec has been performed. UploadServlet is a servlet that ServletExec contains in its server-side classes. When invoked with a specially formed HTTP or GET request, UploadServlet allows an attacker to upload any file to any directory on the server. The uploaded file can have code that can later be executed on the server, leading to remote command execution.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-HTTP_IIS_DOTDOT_EXE_SIG: Sig:3215  :IIS DOT DOT EXECUTE Attack - from
[IP_address] to [IP_address]
```

Explanation An attempt has been made to use Microsoft Internet Information Server to execute commands.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-HTTP_PHPGROUPWARE_RMTCMD_SIG: Sig:5117  :phpGroupWare Remote Command Exec
- from [IP_address] to [IP_address]
```

Explanation A command has been remotely executed using phpGroupWare. phpGroupWare is a multiuser groupware suite that is freely distributed. Security gaps in the software could allow users to execute malicious code remotely by exploiting a vulnerable include() command.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

`%IDS-4-HTTP_WIN_C_SAMPLE_OVFLOW_SIG: Sig:3229  :Website Win-C-Sample Buffer Overflow - from [IP_address] to [IP_address]`

Explanation An attempt has been made to access the win-c-sample program distributed with WebSite servers.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

`%IDS-4-HTTP_WWW_ANYFORM_SIG: Sig:5041  :WWW anyform attack - from [IP_address] to [IP_address]`

Explanation An attacker has attempted to execute arbitrary commands through the anyform cgi-bin script.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

`%IDS-4-HTTP_WWW_COLDFUSION_SIG: Sig:5043  :WWW Cold Fusion Attack - from [IP_address] to [IP_address]`

Explanation An attempt has been made to access example scripts shipped with Cold Fusion Servers. Sub ID 1 indicates an attempt to access the openfile script. This script allows an attacker to upload files to the target host or server. Sub ID 2 indicates an attempt to access displayopenedfile.cfm . This action could indicate that a remote attacker is trying to access files on the target host or server. Sub ID 3 indicates an attempt to upload files to a Cold Fusion server through the exprcalc.cfm

script. This action can be used to overwrite files on the target server or host. These files are part of the documentation system for Cold Fusion. Documentation and example scripts for Cold Fusion should not be kept on production servers.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-HTTP_WWW_COUNT_CGI_OVFLOW_SIG: Sig:3233  :WWW count-cgi Overflow - from
[IP_address] to [IP_address]
```

Explanation An attempt has been made to overflow a buffer in the CGI Count program.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-HTTP_WWW_FRONTPAGE_HTIMAGE_SIG: Sig:5090  :WWW FrontPage htimage.exe
Access - from [IP_address] to [IP_address]
```

Explanation The FrontPage CGI program has been accessed with a filename argument ending with 0,0 .

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-HTTP_WWW_HOST_FIELD_OVFLOW_SIG: Sig:5123  :WWW Host Field overflow - from
[IP_address] to [IP_address]
```

Explanation Web traffic has been detected sending an abnormally large GET request with a large Host field.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-HTTP_WWW_IIS_HTR_OVFLOW_SIG: Sig:5050 :WWW IIS .htr Overflow Attack - from
[IP_address] to [IP_address]
```

Explanation An .htr buffer overrun attack has been detected. This condition indicates a possible attempt to execute remote commands or cause a denial of service against the targeted Windows NT IIS server.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-HTTP_WWW_IIS_NEWDSN_SIG: Sig:5034 :WWW IIS newdsn attack - from
[IP_address] to [IP_address]
```

Explanation An attempt has been made to run the newdsn.exe command via the HTTP server. This action could indicate a remote denial-of-service attack attempt, because this command could be used to fill up the targeted hosts file system.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

%IDS-4-HTTP_WWW_IIS_UNICODE_SIG: Sig:5114 :WWW IIS Unicode Attack - from
[IP_address] to [IP_address]

Explanation An attempt has been made to exploit the Unicode ../ directory traversal vulnerability. This attack looks for commonly exploited combinations that are included in publicly available exploit scripts.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

%IDS-4-HTTP_WWW_MSACDSDLL_SIG: Sig:5071 :WWW msacds.dll Attack - from
[IP_address] to [IP_address]

Explanation An attempt has been made to execute commands or view secured files using privileged access.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-HTTP_WWW_WEBCOMSE_GUESTBOOK_SIG: Sig:5044 :WWW Webcom.se Guestbook Attack
- from [IP_address] to [IP_address]
```

Explanation An attacker has attempted to execute arbitrary commands through the Webcom.se rguest.exe or wguest.exe cgi-bin script.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-HTTP_WWW_WINNT_CMDEXE_SIG: Sig:5081  :WWW WinNT cmd.exe Access - from
[IP_address] to [IP_address]
```

Explanation The Windows NT cmd.exe has been detected in a URL.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-HTTP_WWW_XTERM_DISP_SIG: Sig:5045  :WWW xterm display attack - from
[IP_address] to [IP_address]
```

Explanation A cgi-bin script has attempted to execute the xterm-display command. This action can indicate an attempt to illegally log in to your system. This attack can result in the attackers gaining access to your system. Serious system compromise is possible.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-ICMP_ECHO_REPLY_SIG: Sig:2000  :ICMP Echo Reply - from %i to %i
```

Explanation Triggers when a IP datagram is received with the ''protocol'' field of the IP header set to 1 (ICMP) and the ''type'' field in the ICMP header set to 0 (Echo Reply).

Recommended Action This is extremely common network traffic. Suspicion should beraised when a large number of these packets are found on the network. If nolegitimate reason for this traffic can be identified, prudent securitypractices would suggest that the source be shunned.

Error Message

```
%IDS-4-ICMP_ECHO_SIG: Sig:2004  :ICMP Echo Request - from %i to %i
```

Explanation Triggers when a IP datagram is received with the ''protocol'' field of the IP header set to 1 (ICMP) and the ''type'' field in the ICMP header set to 8 (Echo Request). Commonly used to perform reconnaissance sweeps. Suspicion should be raised when a large number of these packets are found on the network.

Recommended Action The ICMP Echo Request is issued by the source to determineif the destination is ''alive''. When the destination receives the requestit will reply with an ICMP Echo Reply. This request/reply pair is mostcommonly implemented via the ''ping'' utility. Many network management toolsuse this utility or some derivative. This is extremely common networktraffic. Suspicion should be raised when a large number of these packets arefound on the network. If no legitimate reason for this traffic can beidentified, prudent security practices would suggest that the source beshunned.

Error Message

`%IDS-4-ICMP_FRAGMENT_SIG: Sig:2150  :Fragmented ICMP Traffic - from %i to %i`

Explanation Triggers when a IP datagram is received with the protocol field of the IP header set to 1 (ICMP) and either the more fragments flag is set to 1 (ICMP) or there is an offset indicated in the offset field.

Recommended Action IP datagrams may be fragmented normally as they aretransported across the network, but ICMP is rarely fragmented. The trafficshould be investigated. If no legitimate reason for the fragmentation can befound and especially if the packets seem to be originating from a singlesource, prudent security practices would suggest that the host be shunned.

Error Message

`%IDS-4-ICMP_INFO_REPLY_SIG: Sig:2010  :ICMP Information Reply - from %i to %i`

Explanation Triggers when a IP datagram is received with the ''protocol'' field of the IP header set to 1 (ICMP) and the ''type'' field in the ICMP header set to 16 (ICMP Information Reply). No known exploit exists.

Recommended Action This datagram type is obsolete and should not beencountered. When non-specific network traffic of this type is encountered,the most prudent action from a security perspective is to shun or disallowit. If the source of this traffic is legitimate the user will then identify him or herself.

Error Message

`%IDS-4-ICMP_INFO_SIG: Sig:2009  :ICMP Information Request - from %i to %i`

Explanation Triggers when a IP datagram is received with the ''protocol'' field of the IP header set to 1 (ICMP) and the ''type'' field in the ICMP header set to 15 (Information Request).

Recommended Action This datagram type is obsolete and should not beencountered. When non-specific network traffic of this type is encountered,the most prudent action from a security perspective is to shun or disallowit. If the source of this traffic is legitimate the user will then identifyhim or herself.

Error Message

`%IDS-4-ICMP_MASK_REPLY_SIG: Sig:2012  :ICMP Address Mask Reply - from %i to %i`

Explanation Triggers when a IP datagram is received with the ''protocol'' field of the IP header set to 1 (ICMP) and the ''type'' field in the ICMP header set to 18 (Address Mask Reply). No known exploits incorporate this option.

Recommended Action The ICMP Address Mask Request/Reply pair can be used todetermine the sublet mask used on the network. The requesting system issuesthe Address Mask Request bound for a destination, the destination systemresponds with an Address Mask Reply message. This is normal network traffic,but is uncommon on most networks. Suspicion should be raised when a largenumber of these packets are found on the network. If no legitimate reasonfor this traffic can be identified prudent security practices would suggestthat the source be shunned.

Error Message

```
%IDS-4-ICMP_MASK_SIG: Sig:2011  :ICMP Address Mask Request - from %i to %i
```

Explanation Triggers when a IP datagram is received with the ''protocol'' field of the IP header set to 1 (ICMP) and the ''type'' field in the ICMP header set to 17 (Address Mask Request). ICMP Address Mask Requests could be used to perform reconnaissance sweeps of networks.

Recommended Action The ICMP Address Mask Request/Reply pair can be used todetermine the subnet mask used on the network. The requesting system issuesthe Address Mask Request bound for a destination, the destination systemresponds with an Address Mask Reply message. This is normal network traffic,but is uncommon on most networks. Suspicion should be raised when a largenumber of these packets are found on the network. If no legitimate reasonfor this traffic can be identified prudent security practices would suggestthat the source be shunned.

Error Message

```
%IDS-4-ICMP_PARAMPROB_SIG: Sig:2006  :ICMP Parameter Problem on Datagram - from
%i to %i
```

Explanation Triggers when a IP datagram is received with the ''protocol'' field of the IP header set to 1 (ICMP) and the ''type'' field in the ICMP header set to 12 (Parameter Problem on Datagram). No known exploits incorporate this option.

Recommended Action ICMP Parameter Problem datagrams are issued when a routerhas had to drop a datagram because it was malformed. This is a normal andnecessary type of network traffic. Large numbers of this datagram type onthe network are indicative of network difficulties or may be indicative ofhostile actions. If no network problems can be identified to account for thetraffic prudent security practices would suggest that the source be shunned.

Error Message

```
%IDS-4-ICMP_PING_OF_DEATH_SIG: Sig:2154  :ICMP Ping of Death Attack - from %i to %i
```

Explanation Triggers when a IP datagram is received with the protocol field of the IP header set to 1(ICMP), the Last Fragment bit is set, and (IP offset * 8) + (IP data length) 65535 that is to say, the IP offset (which represents the starting position of this fragment in the original packet, and which is in 8 byte units) plus the rest of the packet isgreater than the maximum size for an IP packet. This indicates a denial of service attack.

Recommended Action This indicates a denial of service attack. It is likely that the sourceaddress has been spoofed making shunning ineffective

Error Message

```
%IDS-4-ICMP_REDIRECT_SIG: Sig:2003  :ICMP Redirect - from %i to %i
```

Explanation Triggers when a IP datagram is received with the ''protocol'' field of the IP header set to 1 (ICMP) and the ''type'' field in the ICMP header set to 5 (Redirect).

Recommended Action The redirect message may be issued from a router to informa host of a better route to a requested destination. The host then updatesits routing table to include this route. This method of updating routingtables is an uncommon practice today. When non-specific network traffic ofthis type is encountered, the most prudent action from a securityperspective is to shun or disallow it. If the source of this traffic islegitimate the user will then identify him or herself.

Error Message

```
%IDS-4-ICMP_SOURCEQUENCH_SIG: Sig:2002  :ICMP Source Quench - from %i to %i
```

Explanation Triggers when an IP datagram is received with the ''protocol'' field of the IP header set to 1 (ICMP) and the ''type'' field in the ICMP header set to 4 (Source Quench). This datagram may be used in network management to provide congestion control. Large numbers of this datagram type on the network are indicative of network difficulties or may be indicative of hostile actions.

Recommended Action This datagram may be used in network management to providecongestion control. A source quench packet will be issued when a router isbeginning to lose packets due to the transmission rate of a source. Thesource quench is a request to the source to reduce the rate of datagramtransmission. This datagram type is rarely if ever seen on networks and somesystems do not even support it. Large numbers of this datagram type on thenetwork are indicative of network difficulties or may be indicative ofhostile actions. If no network problems can be identified to account for thetraffic prudent security practices would suggest that the source be shunned.

Error Message

```
%IDS-4-ICMP_TIME_REPLY_SIG: Sig:2008  :ICMP Timestamp Reply - from %i to %i
```

Explanation Triggers when a IP datagram is received with the ''protocol'' field of the IP header set to 1 (ICMP) and the type field in the ICMP header set to 14 (Timestamp Reply). No known exploits incorporate this option.

Recommended Action The ICMP Timestamp Request/Reply pair can be used tosynchronize system clocks on the network. The requesting system issues theTimestamp Request bound for a destination, the destination system respondswith a Timestamp Reply message. This is normal network traffic, but isuncommon on most networks. Suspicion should be raised when a large number ofthese packets are found on the network. If no legitimate reason for thistraffic can be identified prudent security practices would suggest that thesource be shunned.

Error Message

```
%IDS-4-ICMP_TIME_SIG: Sig:2007  :ICMP Timestamp Request - from %i to %i
```

Explanation Triggers when a IP datagram is received with the ''protocol'' field of the IP header set to 1 (ICMP) and the ''type'' field in the ICMP header set to 13 (Timestamp Request). ICMP Timestamp Requests could be used to perform reconnaissance sweeps of networks. No known exploits incorporate this option.

Recommended Action The ICMP Timestamp Request/Reply pair can be used tosynchronize system clocks on the network. The requesting system issues theTimestamp Request bound for a destination, the destination system respondswith a Timestamp Reply message. This is normal network traffic, but isuncommon on most networks. Suspicion should be raised when a large number ofthese packets are found on the network. If no legitimate reason for thistraffic can be identified prudent security practices would suggest that thesource be shunned.

Error Message

```
%IDS-4-ICMP_TIMXCEED_SIG: Sig:2005  :ICMP Time Exceeded for a Datagram - from %i
to %i
```

Explanation Triggers when a IP datagram is received with the ''protocol'' field of the IP header set to 1 (ICMP) and the ''type'' field in the ICMP header set to 11(Time Exceeded for a Datagram). No known exploits incorporate this option.

Recommended Action ICMP Time Exceeded datagrams are issued when a router hashad to drop a datagram whose Time to Live (TTL) flag has expired. This is anormal and necessary type of network traffic. Large numbers of this datagramtype on the network are indicative of network difficulties or may beindicative of hostile actions. If no network problems can be identified toaccount for the traffic prudent security practices would suggest that thesource be shunned.

Error Message

```
%IDS-4-ICMP_TOOLARGE_SIG: Sig:2151  :Large ICMP Traffic - from %i to %i
```

Explanation While it is possible to receive ICMP datagrams that have a size greater than 1024 bytes, this is a highly unusual occurrence that warrants investigation.

Recommended Action While it is possible to receive ICMP datagrams that have asize greater than 1024 bytes, this is a highly unusual occurrence thatwarrants investigation. If no legitimate reason for the large packet sizecan be found and especially if the packets seem to be originating from asingle source, prudent security practices would suggest that the host beshunned.

Error Message

%IDS-4-ICMP_UNREACH_SIG: Sig:2001:ICMP Host Unreachable - from [IP_address] to [IP_address]

Explanation Triggers when an IP datagram is received with the protocol field of the IP header set to 1 (ICMP) and the type field in the ICMP header set to 3 (Host Unreachable). ICMP Host Unreachable datagrams may be used to bypass packet filter security policies as they are rarely filtered in either incoming or outgoing traffic. ICMP Host Unreachable datagrams may also be used to perform denial of service attacks.

Recommended Action This is a very common type of network traffic usually given as a response to a client when there is no path available to the requested host. Large numbers of this datagram type on the network are indicative of network difficulties or may be indicative of hostile actions. If no network problems can be identified to account for the traffic, prudent security practices would suggest that the source of the IP datagrams be shunned. IF Messages

Recommended Action The following are interface messages.

Error Message

%IDS-4-IPFRAG_ATTACK_SIG: Sig:1100 :IP Fragment Attack - from %i to %i

Explanation Triggers when any IP datagram is received with the 'more fragments' flag set to 1 or if there is an offset indicated in the offset field.

Recommended Action IP datagrams may be fragmented normally as theyare transported across the network. This is not uncommon, but is unusual enough that the traffic should be investigated. This is especially important if the network is protected by a packet filtering firewall.

Error Message

%IDS-4-IPOPTS_BAD_SIG: Sig:1000 :Bad IP Option List - from %i to %i

Explanation Triggers on receipt of an IP datagram where the list of IP options in the IP datagram header is incomplete or malformed. No known exploits purposely incorporate this option.

Recommended Action There is no legitimate use for malformed datagrams. This may be indicative of systems that are experiencing problems with their kernel or NIC cards. This is unusual traffic and warrants investigation. When non-specific network traffic of this type is encountered, the most prudent action from a security perspective is to shun or disallow it. If the source of this traffic is legitimate the user will then identify him or herself.

Error Message

```
%IDS-4-IPOPT_LSRR_SIG: Sig:1004  :IP options-Loose Source Route - from %i to %i
```

Explanation   Triggers on receipt of an IP datagram where the IP option list for the datagram includes option 3 (Loose Source Route). This option may be misused to defeat authentication mechanisms that rely on IP addresses as their basis for trust relationships.

Recommended Action   While network troubleshooting may require the legitimate use of this feature, this type of traffic is rarely if ever noted and should comprise much less than 1% of network traffic. Small amounts of source routed traffic most probably indicates that a network problem is being investigated. Large amounts of source routed traffic is more suspicious and a thorough investigation of the source and reason is indicated.

Error Message

```
%IDS-4-IPOPT_RR_SIG: Sig:1001  :IP options-Record Packet Route - from %i to %i
```

Explanation   The IP options list contains one or more options that perform various network management or debugging tasks. This alarm may indicate a reconnaissance attack is in progress against your network.

Recommended Action   While network troubleshooting may require the legitimate use of this feature, this is unusual traffic that warrantsinvestigation. When non-specific network traffic of this type is encountered, the most prudent action from a security perspective is to shun or disallow it. If the source of this traffic is legitimate the user will then identify him or herself.

Error Message

```
%IDS-4-IPOPT_SATID_SIG: Sig:1005  :IP options-SATNET ID - from %i to %i
```

Explanation   Triggers on receipt of an IP datagram where the IP option list for the datagram includes option 8 (SATNET stream identifier). No known exploit exists.

Recommended Action   This option is obsolete and should not be encountered. Whennon-specific network traffic of this type is encountered, the most prudent action from a security perspective is to shun or disallow it. If the source of this traffic is legitimate the user will then identify him or herself.

Error Message

```
%IDS-4-IPOPT_SECURITY_SIG: Sig:1003  :IP options-Provide s,c,h,tcc - from %i to %i
```

Explanation   Triggers on receipt of an IP datagram where the IP option list for the datagram includes option 2. No known exploit exists.

Recommended Action   This signature will trigger if you have implemented IP security options on your network However, this is rarely, if ever, implemented . When non-specific network traffic of this type is encountered, the most prudent action from a security perspective is to shun or disallow it. If the source of this traffic is legitimate the user will then identify him or herself.

Error Message

```
%IDS-4-IPOPT_SSRR_SIG: Sig:1006  :IP options-Strict Source Route - from %i to %i
```

Explanation Triggers on receipt of an IP datagram in which the IP option list for the datagram includes option 2 (Strict Source Routing). This option may be misused to defeat authentication mechanisms that rely on IP addresses as their basis for trust relationships.

Recommended Action While network troubleshooting may require the legitimate use of thisfeature, this type of traffic is rarely if ever noted and should comprise much less than 1% of network traffic. Small amounts of source routed traffic most probably indicates that a network problem is being investigated. Large amounts of source routed traffic is more suspicious and a thorough investigation of the source and reason is indicated.

Error Message

```
%IDS-4-IPOPT_TS_SIG: Sig:1002  :IP options-TimeStamp - from %i to %i
```

Explanation Triggers on receipt of an IP datagram where the IP option list for the datagram includes option 4 (Timestamp). This alarm indicates that a reconnaissance attack may be in progress against your network.

Recommended Action While network troubleshooting may require the legitimate use of this feature, this is unusual traffic that warrantsinvestigation. When non-specific network traffic of this type is encountered, the most prudent action from a security perspective is to shun or disallow it. If the source of this traffic is legitimate the user will then identify him or herself.

Error Message

```
%IDS-4-IP_BROADCAST_SRC_SIG: Sig:1105  :IP Broadcast Source address - from
[IP_address] to [IP_address]
```

Explanation An IP packet with a source address of 255.255.255.255 has been detected. This is a broadcast IP address and should never be seen as a source address on the network. This action may be an indicator of an IP spoof attack or an attempt to subvert a firewall, proxy, or gateway.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-IP_FRAG_OVERRUN_SIG: Sig:1202  :IP Fragment Overrun - from [IP_address] to
[IP_address]
```

Explanation A reassembled fragmented IP datagram exceeds the declared IP data length or the maximum datagram length. By definition, no IP datagram should be larger than 65,535 bytes. Systems that try to process these large datagrams can crash. This type of fragmented traffic can indicate a denial-of-service attempt.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-IP_FRAG_TOOSMALL_SIG: Sig:1206  :IP Fragment Too Small - from [IP_address]
to [IP_address]
```

Explanation An IP fragment other than the final fragment is less than 400 bytes, indicating that the fragment might have been intentionally crafted. Small fragments may be used in denial-of-service attacks or in an attempt to bypass security measures or detection.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-IP_IMPOSSIBLE_SIG: Sig:1102  :Impossible IP Packet - from %i to %i
```

Explanation This triggers when an IP packet arrives with source equal to destination address. This signature will catch the so-called Land Attack.

Recommended Action This should never occur in legitimate traffic.

Error Message

```
%IDS-4-IP_LOCALHOST_SRC_SIG: Sig:1104  :IP Localhost Source Spoof - from
[IP_address] to [IP_address]
```

Explanation An IP packet with a source address of 127.x.x.x has been detected. This is a local host IP address and should never be seen on the network This condition might indicate that someone is trying to take advantage of local host trust relationships to either gain access to or in some other way subvert a target machine.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-IP_MULTICAST_SRC_SIG: Sig:1106  :IP Multicast Source address - from
[IP_address] to [IP_address]
```

Explanation An IP packet with a source address of 224.x.x.x has been detected. This is a multicast host IP address and should never be seen as a source address on the network. This condition may be an indicator of an IP spoof attack or an attempt to subvert a firewall, proxy, or gateway.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-IP_RFC_1918_SIG: Sig:1107  :IP RFC 1918 Address Seen - from [IP_address]
to [IP_address]
```

Explanation ARFC 1918 addresses have been detected.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-IP_UNKNOWN_PROTO_SIG: Sig:1101  :Unknown IP Protocol - from %i to %i
```

Explanation Triggers when an IP datagram is received with the protocol field set to 101 or greater. The use of these protocol types is highly unusual and should be investigated.

Recommended Action Locally developed protocols that may use these protocol types will trigger the signature. The use of these protocol types is highly unusual and should be investigated. When non-specific network traffic of this type is encountered, the most prudent action from a security perspective is to shun or disallow it.If the source of this traffic is legitimate the user will then identify him or herself.

Error Message

```
%IDS-4-LOST_CONNECT: Connection to HostID  :%u OrgID  :%u
```

Explanation Triggers when a connection drops and there is no previous connection.

Recommended Action This message indicates that the IDS cannot communicate with the Director. Check connectivity to the Director and check Postofficeconfiguration on both the router and the Director.

Error Message

```
%IDS-4-RPC_CALLIT_REQUEST: Sig:6103  :Proxied RPC Request - from %i to %i
```

Explanation Triggers when a proxied RPC request is sent to the portmapper of a target host.

Recommended Action If this procedure is allowed on your network those usersthat employ it will trigger the signature. This may be a serious attempt atgaining unauthorized access and if the source of the attempt is not withinyour network they should be shunned.

Error Message

```
%IDS-4-RPC_DUMP_REQUEST: Sig:6102  :RPC Dump - from %i to %i
```

Explanation Triggers when an RPC dump request isissued to a target host.

Recommended Action This is a common procedure performed by many systemadministrators and wary users to determine which RPC services are beingoffered. Executing this procedure is most likely due to curiosity on thepart of a novice user or a system administrator performing systemmaintenance. If upon investigation no valid user can be associated with thisevent, prudent security practices would suggest shunning the source.

Error Message

```
%IDS-4-RPC_PORTREQ_MOUNTD: Sig:6155  :RPC mountd Portmap Request - from %i to %i
```

Explanation Triggers when a request is made to the portmapper for the mount daemon (mountd) port.

Recommended Action If this procedure is allowed on your network those usersthat employ it will trigger the signature. This may be a serious attempt atgaining unauthorized access and if the source of the attempt is not withinyour network they should be shunned.

Error Message

```
%IDS-4-RPC_PORTREQ_REXD: Sig:6175  : RPC rexd Portmap Request - from %i to %i
```

Explanation Triggers when a request is made to the portmapper for the remote execution daemon (rexd) port. The remote execution daemon is the serverresponsible for remote program execution. This may be indicative of an attempt to gain unauthorized access to system resources.

Recommended Action If this procedure is allowed on your network, those userswho employ it will trigger the signature. This may be a serious attempt atgaining unauthorized access and if the source of the attempt is not withinyour network, it should be shunned. %IDS-4-RPC_PORTREQ_YPBIND : Sig:6151 :RPC ypbind Portmap Request - from %i to %i

Explanation Triggers when a request is made to the portmapper for the YP bind daemon (ypbind) port.

Recommended Action If this procedure is allowed on your network those usersthat employ it will trigger the signature. This may be a serious attempt atgaining unauthorized access and if the source of the attempt is not withinyour network they should be shunned.

Error Message

```
%IDS-4-RPC_PORTREQ_YPBIND: Sig:6151  :RPC ypbind Portmap Request - from
[IP_address] to [IP_address]
```

Explanation A request has been made to the portmapper for the YP bind daemon (ypbind) port. If this procedure is allowed on your network, users who employ it will trigger this message.

Recommended Action This request may be a serious attempt to gain unauthorized access. If the source of the attempt is not within your network, block the source of this request.

Error Message

```
%IDS-4-RPC_PORTREQ_YPPASSWDD: Sig:6152  :RPC ypbind yppasswdd Portmap Request -
from %i to %i
```

Explanation Triggers when a request is made to the portmapper for the YP password daemon (yppasswdd) port.

Recommended Action If this procedure is allowed on your network those usersthat employ it will trigger the signature. This may be a serious attempt atgaining unauthorized access and if the source of the attempt is not withinyour network they should be shunned.

Error Message

```
%IDS-4-RPC_PORTREQ_YPSERV: Sig:6150  :RPC ypserv Portmap Request - from %i to %i
```

Explanation Triggers when a request is made to the portmapper for the YP server daemon (ypserv) port.

Recommended Action If this procedure is allowed on your network those usersthat employ it will trigger the signature. This may be a serious attempt atgaining unauthorized access and if the source of the attempt is not withinyour network they should be shunned.

Error Message

```
%IDS-4-RPC_PORTREQ_YPUPDATED: Sig:6153  :RPC ypupdated Portmap Request - from %i
to %i
```

Explanation Triggers when a request is made to the portmapper for the YP update daemon (ypupdated) port.

Recommended Action If this procedure is allowed on your network those usersthat employ it will trigger the signature. This may be a serious attempt atgaining unauthorized access and if the source of the attempt is not withinyour network they should be shunned.

Error Message

```
%IDS-4-RPC_PORTREQ_YPXFRD: Sig:6154  :RPC ypxfrd Portmap Request - from %i to %i
```

Explanation Triggers when a request is made to the portmapper for the YP transfer daemon (ypxfrd) port.

Recommended Action If this procedure is allowed on your network those usersthat employ it will trigger the signature. This may be a serious attempt atgaining unauthorized access and if the source of the attempt is not withinyour network they should be shunned.

Error Message

```
%IDS-4-RPC_REXD_REQUEST: Sig:6180  :RPC rexd Attempt - from %i to %i
```

Explanation Triggers when a call to the rexd program is made. The remote execution daemon is the server responsible for remote program execution. Thismay be indicative of an attempt to gain unauthorized access to system resources.

Recommended Action If this service is being used legitimately, this alarm willfire. For security purposes, this service really should not be used.

Error Message

```
%IDS-4-RPC_SET_REQUEST: Sig:6100  :RPC Port Registration - from %i to %i
```

Explanation Triggers when attempts are made to register new RPC services on a target host.

Recommended Action No benign triggers exist for this signature. Prudentsecurity practices suggest that the source of this attempt should beshunned.

Error Message

```
%IDS-4-RPC_STATD_OVFLW: Sig:6190  :statd Buffer Overflow - from %i to %i
```

Explanation Triggers when a large statd request is sent.

Recommended Action You should not see this in legitimate traffic.

Error Message

```
%IDS-4-RPC_UNSET_REQUEST: Sig:6101  :RPC Port Unregistration - from %i to %i
```

Explanation   Triggers when attempts are made to unregister new RPC services on a target host.

Recommended Action   No benign triggers exist for this signature. Prudentsecurity practices suggest that the source of this attempt should beshunned.

Error Message

```
%IDS-4-SDF_LOAD_FAILED: failed to [chars] SDF from [chars]
```

Explanation   An SDF file has failed to load. This condition may occur if the SDF file is on an unreachable network server, if the SDF file does not have the correct read permissions, or if the decryption routines for the SDF file have failed.

Recommended Action   Ensure that the server on which the SDF resides is reachable by the router and that the SDF has the correct read permissions.

Error Message

```
%IDS-4-SDF_PARSE_FAILED: [chars] at Line [dec] Col [dec] Byte [dec] Len [dec]
```

Explanation   An SDF file was not parsed correctly. The SDF may be corrupted or could not be properly loaded on the router.

Recommended Action   Ensure that the proper SDF is being loaded on the router and that the router is able to access and read it correctly.

Error Message

```
%IDS-4-SIGNATURE: Sig:[dec] Subsig:[dec] Sev:[dec] [chars] [[IP_address]:[dec] -
[IP_address]:[dec]]
```

Explanation   An IDS signature has been triggered.

Recommended Action   Refer to the Cisco Network Security Database for more details and recommended actions specific to each signature.

Error Message

```
%IDS-4-SIG_SUMMARY: Sig:[dec] Subsig:[dec] Global Summary: [dec] alarms in this
interval
```

Explanation   A flood of the specified IDS signature has been detected and summarized.

Recommended Action   Refer to the Cisco Network Security Database for more details and recommended actions specific to each signature.

Error Message

```
%IDS-4-STR_MATCH_SIG: Sig:8000  :FTP Retrieve Password File - from %i to %i
```

Explanation Triggers on string ''passwd'' issued during an FTP session.

Recommended Action System administrators might use this service to updatesystem files. It is a high security risk if this is normal practice andshould be avoided. No other benign triggers exist for this signature. Ifafter investigation the alarm was not generated by a system administrator,prudent security practices would suggest that the source be shunned.

Error Message

```
%IDS-4-SYSERROR: Unexpected error ([chars]) at line [dec] func [chars]() file
[chars]
```

Explanation An unexpected internal system error has occurred.

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

Error Message

```
%IDS-4-TCP_FIN_ONLY_SIG: Sig:3042  :TCP - FIN bit with no ACK bit in flags - from
%i to %i
```

Explanation Triggers when a TCP packet is received with the FIN bit set but with no ACK bit set in the flags field.

Recommended Action There is no legitimate use for malformed TCP datagrams. This is unusual traffic and warrants investigation. Hacker tools will generateTCP packets with the FIN bit set but with no ACK bit set in the flags field in an attempt to elude intrusion dection. When non-specific network traffic of this type is encountered, the most prudent action from a security perspective is to shun or disallow it. If the source of this traffic is legitimate the user will then identify him or herself.

Error Message

```
%IDS-4-TCP_FRAG_NULL_SIG: Sig:3038  :Fragmented NULL Packet - from [IP_address]
to [IP_address]
```

Explanation A single fragmented TCP packet with none of the SYN, FIN, ACK, or RST flags set has been sent to a specific host. This action indicates that a reconnaissance sweep of your network may be in progress. The use of this type of packet indicates an attempt to conceal the sweep. This may be the prelude to a more serious attack.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-TCP_FRAG_ORPHAN_FIN_SIG: Sig:3039  :Fragmented Orpah FIN Packet - from
[IP_address] to [IP_address]
```

Explanation A single fragmented, orphaned TCP FIN packet has been sent to a privileged port (having a port number lower than 1024) on a specific host. This indicates that a reconnaissance sweep of your network may be in progress. The use of single fragmented FIN packet, when no other messages have been received, indicates an attempt to conceal the sweep by slowly scanning the network in an effort to invalidate port or host scan detectors. This condition can be a prelude to a more serious attack.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-TCP_FRAG_SYN_FIN_SIG: Sig:3043  :Fragmented SYN/FIN Packet - from
[IP_address] to [IP_address]
```

Explanation A single fragmented TCP packet with the SYN and FIN flags set has been sent to a specific host. This action is indicative that a reconnaissance sweep of your network may be in progress. The use of this type of packet indicates an attempt to conceal the sweep. This can be a prelude to a more serious attack.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-TCP_FTP_CWDROOT_SIG: Sig:3152  :FTP CWD
```

Error Message

```
%IDS-4-TCP_FTP_PORT_BADADDR_SIG: Sig:3153  :FTP Improper Address Specified - from
[IP_address] to [IP_address]
```

Explanation A port command has been issued with an address that is not the same as the requesting host.

Recommended Action No action is required.

Error Message

```
%IDS-4-TCP_FTP_PORT_BADPORT_SIG: Sig:3154  :FTP Improper Port Specified - from %i
to %i
```

Explanation Triggers if a port command is issued with a data port specified that is 65535.

Recommended Action Triggers if a port command is issued with a data port specifiedthat is 65535.

Error Message

```
%IDS-4-TCP_FTP_SITE_SIG: Sig:3150  :FTP Remote Command Execution - from %i to %i
```

Explanation Triggers when someone tries to execute the FTP SITE command.

Recommended Action The FTP Site command allows a user to execute a limitednumber of commands via the FTP server on the host machine. No authenticationis required to execute the command. The commands that may be executed varyfrom system to system and on many systems the SITE command is notimplemented. Recommend that the SITE command be disabled on FTP servers ifpossible. If this signature is triggered from a source outside of yournetwork prudent security practices would suggest that the source be shunned.

Error Message

```
%IDS-4-TCP_FTP_SYST_SIG: Sig:3151  :FTP SYST Command Attempt - from %i to %i
```

Explanation Triggers when someone tries to execute the FTP SYST command.

Recommended Action The FTP SYST command returns the type of operating systemthat the FTP server is running. Authentication is not required to executethis command. SYST provides information that may be used to refine attackmethods. FTP from Linux causes SYST signature to fire. Some proxies, such asthe TIS Toolkit, issue the SYST command as a matter of course. Running anFTP version with SYST disabled.

Error Message

```
%IDS-4-TCP_MAJORDOMO_EXEC_BUG: Sig:3107  :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 Prudent security practices would suggest that the source of this attempt be shunned.

Error Message

```
%IDS-4-TCP_NO_FLAGS_SIG: Sig:3040  :TCP - No bits set in flags - from %i to %i
```

Explanation Triggers when a TCP packet is received with no bits set in the flags field.

Recommended Action There is no legitimate use for malformed TCP datagrams. This is unusual traffic and warrants investigation. Hacker tools will generateTCP packets with no bits set in the flags field in an attempt to eludeintrusion dection. When non-specific network traffic of thistype is encountered, the most prudent action from a security perspectiveis to shun or disallow it. If the source of this traffic is legitimatethe user will then identify him or herself.

Error Message

```
%IDS-4-TCP_SENDMAIL_BAD_FROM_SIG: Sig:3102  :Sendmail Invalid Sender - from %i to
%i
```

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

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

Error Message

```
%IDS-4-TCP_SENDMAIL_BAD_TO_SIG: Sig:3101  :Sendmail Invalid Recipient - from %i
to %i
```

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

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

Error Message

```
%IDS-4-TCP_SENDMAIL_BOUNCE_SIG: Sig:3100  :Smail Attack - from %i to %i
```

Explanation Triggers on the very common ''smail'' attack against e-mail servers. This attack attempts to cause e-mail servers to execute programs on the attacker's behalf.

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

Error Message

```
%IDS-4-TCP_SENDMAIL_DECODE: Sig:3105  :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 The decode alias is used to uudecode files and is primarilyimplemented as a convenience for system administration. For securitypurposes this should not be allowed and the service should be disabled. Ifallowed, users that mail to the alias will trigger this signature. Recommendshunning of hosts that attempt to mail to this alias especially if they areoutside of your network.

Error Message

```
%IDS-4-TCP_SENDMAIL_INVALID_COMMAND: Invalid SMTP command - from %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 warrant investigation.

Error Message

```
%IDS-4-TCP_SENDMAIL_OLD_SIG: Sig:3104  :Archaic Sendmail Attacks - from %i to %i
```

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

Recommended Action There is no reason for this type of traffic to be seen onmodern networks. There is little chance that there will be any adverseeffects from someone attempting these ''old'' hacks. Prudent securitypractices would suggest that the source of this attempt be shunned.

Error Message

```
%IDS-4-TCP_SENDMAIL_SPAM_SIG: Sig:3106  :Excessive Rcpt to: (SPAM) - from %i to %i
```

Explanation Parse for RCPT TO : in header. Alarm on threshold.

Recommended Action Some mailing list software may trigger this signature.

Error Message

```
%IDS-4-TCP_SENDMAIL_VRFY_SIG: Sig:3103  :Sendmail Reconnaissance - from %i to %i
```

Explanation Triggers when ''expn'' or ''vrfy'' commands are issued to the SMTP port.

Recommended Action These commands are commonly used to verify that a user mailaccount exists on the server or to expand an alias to determine who theactual recipients of a message may be. Users that use the EXPN and VRFYfunctions for legitimate purposes will trigger this signature. Theinformation that can be obtained is useful, but not dangerous on its own.Monitoring of future traffic for patterns of misuse is recommended.

Error Message

```
%IDS-4-TCP_SYN_ATTACK_SIG: Sig:3050  :Half-Open Syn Flood - from %i to %i
```

Explanation Triggers when the number of half-open TCP connections exceeds the high-water mark or the one minute high rate mark

Recommended Action There are no known sources that would legitimately generatethis traffic pattern. This may be indicative of some type of network problemand should be investigated. To avoid depletion of your network resources itis recommended that the source be shunned during the course of theinvestigation. If no network problems are discovered prudent securitypractices would suggest that the source be shunned permanently.

Error Message

```
%IDS-4-TCP_SYN_FIN_SIG: Sig:3041  :TCP - SYN and FIN bits set - from %i to %i
```

Explanation Triggers when a TCP packet is received with both the SYN and FIN bits set in the flags field.

Recommended Action There is no legitimate use for malformed TCP datagrams. This is unusual traffic and warrants investigation. Hacker tools will generateTCP packets with the SYN and FIN bits set in the flags field in an attempt to eludeintrusion dection. When non-specific network traffic of thistype is encountered, the most prudent action from a security perspectiveis to shun or disallow it. If the source of this traffic is legitimatethe user will then identify him or herself.

Error Message

```
%IDS-4-UDP_BOMB_SIG: Sig:4050  :UDP Bomb - from %i to %i
```

Explanation Triggers when the UDP length specified is less than the IP length specified. This malformed packet type is associated with a denial of service attempt.

Recommended Action There is no legitimate use for malformed datagrams. Thismay be indicative of systems that are experiencing problems with theirkernel or NIC cards. This is unusual traffic and warrants investigation.When non-specific network traffic of this type is encountered, the mostprudent action from a security perspective is to shun or disallow it. If thesource of this traffic is legitimate the user will then identify him orherself.

Error Message

```
%IDS-4-UDP_CHARGEN_DOS_SIG: Sig:4052  :UDP Chargen DoS - from [IP_address] to
[IP_address]
```

Explanation A UDP packet with a source port of 7 and a destination port of 19 has been detected.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-UDP_IOS_BOMB_SIG: Sig:4600  :UDP IOS Bomb - from [IP_address] to
[IP_address]
```

Explanation An improperly formed SYSLOG transmission bound for UDP port 514 has been received.

Recommended Action Block the source of the SYSLOG transmission.

Error Message

```
%IDS-4-UDP_SNORK_SIG: Sig:4051  :UDP Snork - from [IP_address] to [IP_address]
```

Explanation A UDP packet with a source port of either 135, 7, or 19 and a destination port of 135 has been detected.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

```
%IDS-4-UDP_TFTP_PASSWD_SIG: Sig:4100  :Tftp Passwd File - from %i to %i
```

Explanation Triggered when someone tries to tftp a password file.

Recommended Action System administrators might use this service to updatesystem files. It is a high security risk if this is normal practice andshould be avoided. No other benign triggers exist for this signature. Ifafter investigation the alarm was not generated by a system administrator,prudent security practices would suggest that the source be shunned.

Error Message

```
%IDS-4-UNSUPPORTED_SIG: [chars] [dec]:[dec] [chars]=[chars] - This signature
cannot be supported
```

Explanation An unsupported parameter has been encountered an SDF file was being parsed. The unsupported parameter is required for the signature. The entire signature has been deleted.

Recommended Action Ensure that the SDF file that is being loaded on the router does not contain any parameters that are not supported by the IDS in the Cisco IOS software.

Error Message

```
%IDS-5-PACKET_DROP: [chars] - fail closed - packets dropped
```

Explanation An IDS module has failed. Packets has been dropped by the failed IDS module. As a result of this condition, the system configuration specifies that a fail closed operation will occur.

Recommended Action No action is required.

Error Message

```
%IDS-5-PACKET_UNSCANNED: [chars] - fail open - packets passed unscanned
```

Explanation An IDS module has failed. Packets that were not scanned by the failed IDS module have been passed. As a result of this condition, the system configuration specifies that a fail closed operation will occur.

Recommended Action No action is required.

Error Message

```
%IDS-6-BUILTIN_SIGS: [chars] to load builtin signatures
```

Explanation The router is about to load the built-in signatures.

Recommended Action No action is required.

Error Message

```
%IDS-6-ENGINE_BUILDING: [chars] - [dec] signatures - [dec] of [dec] engines
```

Explanation The SME has begun building.

Recommended Action No action is required.

Error Message

```
%IDS-6-ENGINE_BUILD_SKIPPED: [chars] - there are no new signature definitions for
this engine
```

Explanation No signature definitions are available, or there are no changes to the existing signature definitions of an IDS SME.

Recommended Action No action is required.

Error Message

```
%IDS-6-ENGINE_READY: [chars] - [dec] ms - packets for this engine will be scanned
```

Explanation An IDS SME has been built and is ready to scan packets.

Recommended Action No action is required.

Error Message

`%IDS-6-SDF_LOAD_SUCCESS: SDF loaded successfully from [chars]`

Explanation An SDF file has been loaded successfully from the location specified in the message text.

Recommended Action No action is required.

Error Message

`%IDS-6-WARNING: Unexpected Condition Func [chars]() Line [dec]`

Explanation An unexpected condition has occurred in the code.

Recommended Action Note the number that appears in the error message text after Sig: and perform the following actions: a.Open an Internet browser and log onto the Cisco.com website.

Recommended Action b.Search for Cisco Secure Encyclopedia.

Recommended Action c.Open the link for the Cisco Secure Encyclopedia.

Recommended Action d.Click on the IDS Signatures link (Cisco.com password is required).

Recommended Action e.Click on the List All Signatures link.

Recommended Action f.Locate the signature number that corresponds to the number following Sig: in the error message text for more information on the nature of the error and corrective actions to perform.

Error Message

`%IDS-7-ENGINE_UNKNOWN: [chars] - unknown engine encountered while parsing SDF`

Explanation An unknown and therefore unsupported SME has been encountered while an SDF file was being parsed.

Recommended Action Ensure that the SDF file that is being loaded on the router contains only engines that are supported by the IDS in the Cisco IOS software.

Error Message

`%IDS-7-UNSUPPORTED_PARAM: [chars] [dec]:[dec] [chars]=[chars] - This parameter is not supported`

Explanation An unsupported parameter has been encountered while an SDF file was being parsed. IDS will scan for the signature without using this parameter.

Recommended Action Ensure that the SDF file that is being loaded on the router does not contain any parameters that are not supported by the IDS in the Cisco IOS software.

IDTATM25 Messages

Error Message

%IDTATM25-1-DISCOVER: Only found %d interfaces on bay %d, shutting down bay

    Explanation The ATM25 network module hardware may be bad

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

Error Message

%IDTATM25-1-INITFAIL: IDTATM25(%d/%d), Init failed at %s.

    Explanation The ATM25 network module hardware may be bad

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

Error Message

%IDTATM25-3-FAILSETUPVC: Interface %s, Failed to setup vc %d (Cause: %s)

    Explanation The ATM25 network module hardware may be bad

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

Error Message

%IDTATM25-3-FAILTEARDOWNVC: Interface %s, Failed to down vc %d (Cause: %s)

    Explanation The ATM25 network module hardware may be bad

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

Error Message

%IDTATM25-3-NOTIDTATM25: Device reported %#x

    Explanation The ATM25 network module hardware may be bad

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

Error Message

`%IDTATM25-3-RXLOSTSYNC: IDB= %s, RX lost sync, Interface reset`

Explanation RX hang

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

Error Message

`%IDTATM25-3-TXHANG: IDB= %s, TX hang, Interface reset`

Explanation TX hangs.

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

Error Message

`%IDTATM25-3-UNSUPPORTED: Interface %s, %s not supported`

Explanation The ATM25 network module hardware may be bad

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

Error Message

`%IDTATM25-6-TXLIMIT: ATM transmit bandwidth is limited to smallest shaped value.`

Explanation Any PVC configured with traffic shaping will limit the entire ATM interface to not exceed the bandwidth of any traffic shaped pvc.

Error Message

`%IEDGE-3-CH_INTERNAL_ERROR: Internal error in command processing - session handle=[hex]`

Explanation There has been an internal error relating to CoA command processing.

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

Error Message

```
%IEDGE-3-CH_REGISTER_ERROR: CoA registration error in command processing - type
'[chars]'
```

Explanation An internal error occurred related to a Change of Authorization (CoA) command processing has occurred.

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

Error Message

```
%IEDGE-4-PBHK_DEPLETED_INDICES: No more portbundles can be allocated
```

Explanation The source interfaces configured for Portbundle Hostkeyfeature are not sufficient and the number of portbundles available are all used up. Add more source interfaces in the configuration.

Recommended Action Check configuration on the ISG .

Error Message

```
%IEDGE-4-TC_UNDEFINED_ACL: Traffic class ACL [chars] is not defined, creating
permit all ACL
```

Explanation The ACL specified for classification of traffic is not configured on the ISG. Creating a permit all ACL.ACL should be configured on the ISG.

Recommended Action Configure the ACL on the ISG.

IF Messages

The following are interface messages.

Error Message

```
%IF-2-IDB_TABLE_INIT: Malloc failed while initializing idb table
```

Explanation A memory allocation failure occurred while an IDB table was being initialized.

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

Error Message

```
%IF-4-NOBGPROCESS : Network background process not running. [chars]
```

Explanation A process which manages network interface background processing is not yet running, but another system process has tried to send the process a message.

Recommended Action An interface on the router may have missed a request to bring itself up. If that happens, it may be necessary to reset the interface by entering a shutdown and then a no shutdown command.

Error Message

```
%IF-3-BADHWUNLOCK: ([chars]) attempted to unlock [chars] ([dec]). Locked by
[chars] ([dec]).
```

Explanation An attempt was made to release a semaphore that was held by another process.

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

Error Message

```
%IF-3-BADLOCK: Invalid lock use for [chars]: [chars]
```

Explanation Application layer code has attempted to access an unlocked interface.

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

Error Message

```
%IF-3-BADMACADDRTYPE: illegal mac address type, %d
```

Explanation   This is an interal error that was recovered gracefully.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IF-3-BAD_MTU: Internal error. MTU on [chars] too large or negative. Truncating
from [dec] to [int].
```

Explanation   An internal software error has occurred. The system attempted to set the MTU on an interface to an invalid value.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IF-3-HWNOTLOCKED: [chars] not locked. Unlock attempted by ([chars]).
```

Explanation   An attempt was made to release a semaphore for an unlocked interface.

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

Error Message

`%IF-3-IDB_LIST_BAD_REF_COUNT: A bad reference count was encountered in an idb list element.`

Explanation   A software error occurred.

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

Error Message

`%IF-3-SEMAHOG: ([chars]) could not get [chars] semaphore. Held by ([chars]).`

Explanation   The system was unable to obtain a semaphore for an interface.

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

Error Message

`%IF-4-BACKWARD_COUNTERS: Corrected for backward [chars] counters ([int] - [int]) on [chars]`

Explanation   The interface specified in the message has a packet counter that has decreased in number. This condition can occur if a packet is counted and then dropped. This event was detected and corrected.

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

Error Message

```
%IF-4-NOBGPROCESS: Network background process not running. [chars]
```

Explanation A process which manages network interface background processing is not yet running, but another system process has tried to send the process a message.

Recommended Action An interface on the router might have missed a request to bring itself up. If that happens, it might be necessary to reset the interface by entering a **shutdown** command and then a **no shutdown**.

IFDAMP Messages

The following are Interface Dampening messages.

Error Message

```
%IFDAMP-5-UPDOWN: interface [chars] update [chars] state to [chars], interface is
[chars]suppressed
```

Explanation Dampening interface changed state.

Recommended Action Informational message only. No action is required.

Error Message

```
%IFDAMP-5-ZERODELAY: dampening reuse timer is updated with 0 delay time
```

Explanation Inconsistency of dampening reuse timer wheel.

Recommended Action Informational message only. No action is required.

Error Message

```
%IFINDEX-4-NOIFINDEX: All SNMP if indices are exhausted
```

Explanation All SNMP Interface Group MIB Module (IF-MIB) indices are exhausted. Interfaces will not get an IF index to register to the IF-MIB.

Recommended Action Unavailable.

Error Message

```
%IFMGR-3-BADIFINDEXTABLE: The file nvram:ifIndex-table is corrupt.
```

Explanation The file is not in the expected format.

Recommended Action If possible, delete the file. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

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

Error Message

```
%IFMGR-3-DUP_IFINDEX: Duplicate ifIndex ([dec]) found for ifDescr '[chars]';
exists in ifTable for ifDescr '[chars]'.
```

Explanation Two interfaces have the same interface index in the interface manager assigned list. The
second interface registered with the interface manager will be assigned a new index.

Recommended Action If interface index persistence is not required, then no action is required.
Otherwise, reload the router with the proper interface index table and image. If the error message
appears from the standby route processor (RP), reload the standby RP.

Error Message

```
%IFMGR-3-IFDB: IF manager interface database [chars] failure- [dec]
```

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

```
%IFMGR-3-IFINDEX_PERSIST_ENTRY_CORRUPT: [chars] seems to be corrupted. Trying to
read [dec] size
```

Explanation The ifIndex-table seems to be corrupted.

Recommended Action Delete the ifindex-table.

Error Message

```
%IFMGR-3-IFTDB: IF manager interface table database %s failure- %d
```

Recommended Action TBD

Error Message

```
%IFMGR-3-INVALID_PERSISTENT_DATA: Invalid persistent data
```

Explanation Trying to write invalid persistent data.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

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

Error Message

```
%IFMGR-3-NOIMACP: IF manager control process failed to start
```

Explanation   The IF manager control process failed to start.

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

Error Message

```
%IFMGR-3-NOTYPEVECTOR: Interface manager failed to allocate IF type vector. size
%d
```

Explanation   The interface type vector was not able to be allocated with the number of elements
required--initially or resize.

Error Message

```
%IFMGR-3-NOVECTOR: Interface manager failed to allocate IF vector. size [dec]
```

Explanation   The interface vector was not able to be allocated with the number of elements required
— initially or resize (see size in the error message).

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

Error Message

```
%IFMGR-3-VECTOREXD: IF manager attempted to use interface [dec] outside vector
range.
```

Explanation   Attempted to add an interface with too large of an ifIndex to the IF-MGR database.

Recommended Action   Additional IF-MGR warnings and/or errors should accompany this message. Copy the messages exactly as they appear on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in non-zipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%IFMGR-3-VECTORPOSUSED: IF manager attempted to add interface [dec] which was
already added.
```

Explanation   IF-MGR tried to add an ifIndex value which already exists.

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

Error Message

```
%IFMGR-4-NOIFINDEX: All SNMP if indices are exhausted
```

Explanation   All SNMP MIB indices have been exhausted. Interfaces will not be able to obtain an interface index that they can use to register with the interface MIB.

Recommended Action   Attempt a system reload. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IFMGR-4-NOSYNC: ifIndex not being synced between active and standby
```

Explanation   When the standby comes up, then the tuple of ifIndex and ifDescr is synced so that when interfaces comes up they get the same ifIndex. This error happens when the interface does not get the ifIndex for the specified ifDescr.

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

Error Message

```
%IFMGR-4-STACK_RELATIONSHIP_ADD_ERROR: [chars]: Request for creating invalid
stack relationship [dec], [dec]
```

Explanation   The IF MGR received the call to add invalid stack relationship. The higher and lower ifIndex are shown in the message. The module of the IF MGR from where this message is generated is also shown in the message.

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

Error Message

```
%IFMGR-4-VECTORIFSUSPECT: IF manager added interface [dec] which is unexpectedly
large.
```

Explanation   The ifIndex allocation scheme gives out sequential ifIndex values. This message comes from the IF-MGR DB when it is trying to add an ifIndex value much larger than the former greatest ifIndex value in the DB.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

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

Error Message

```
%IFMGR-5-RESTART: [chars]
```

Explanation   The IF MGR process has restarted.

Recommended Action   This is a notification message only . The system should recover on its own. No action is required.

Error Message

```
%IFMGR-7-NO_IFINDEX_FILE: Unable to open [chars] [chars]
```

Explanation   The system found no saved ifIndex information, and ifIndex has not persisted across reboots. The ifIndices will be reassigned.

Recommended Action   If the **snmp-server ifIndex persist** command is not configured, no action is required. If the **snmp-server ifindex persist** has been configured, then copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

IFS Messages

Error Message

```
%IFS-3-FSDUP: Failed to add %s, filesystem prefix exists
```

Explanation   A file system cound not be added because another file system exists with the same name.

Recommended Action   Contact your technical support representative.

Error Message

```
%IFS-3-FSMAX: Failed to add %s, maximum filesystems %d
```

Explanation   The router has reached the maximum number of file systems that can be supported at one time.

Recommended Action   Contact your technical support representative.

Error Message

```
%IFS-3-FS_CREATE_FAIL: Failed to create %s file system, %s
```

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

```
%IFS-3-FS_CREATE_FAIL2: Failed to create %s simple file system, %s
```

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

```
%IFS-3-FS_MISSING_FUNCTIONS: '%s' file system missing required functions, not
created
```

Explanation Some file systems require a certain set of function to be present in order to be usable. This file sustem does not support all the mandatory functionality.

Recommended Action Call your technical support representative for assistance.

Error Message

```
%IFS-3-FS_STRUCT_ERROR: Data does not match expected internal representation
```

Explanation A mismatch exists between the representation of data that was extracted from the file system and its expected format. This condition may occur while the system is operating in a dual RP environment that has two different Cisco IOS software versions operating on the two RPs.

Recommended Action If the system is operating in a dual RP environment, ensure that both RPs are running the same version of Cisco IOS software. If the system is not operating in a dual RP environment, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%IFS-4-FILEMAX: Failed to open %s, maximum open files %d)
```

Explanation The router has reached the maximum number of files that may be open at one time.

Recommended Action Close some files and try again. If this messages recurs, contact your technical support representative.

IGMP Messages

Error Message

```
%IGMP-3-NO_DNS_SERVER: No DNS server is configured. DNS-based SSM mapping should
be disabled if no DNS server is configured.
```

Explanation There is no DNS server present. Processing IGMP packets may be delayed if the DNS-lookup is done continuosly.

Recommended Action Disable DNS-based SSM mapping if there is no DNS-server present in the network. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information that you have gathered.

Error Message

```
%IGMP-3-QUERY_INT_MISMATCH: Received a non-matching query interval %d, from
querier address %i
```

Explanation Mismatch of IGMP version found between routers.

Recommended Action Configure both the interfaces with same IGMP version. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IGMP-6-IGMP_CHANNEL_LIMIT: IGMP limit exceeded for channel ([IP_address],
[IP_address]) on [chars] by host [IP_address]
```

Explanation The allowed number of IGMP joiners reached the configured limit. New joiners cannot be allowed unless the configuration is changed.

Recommended Action Use the global and/or interface **ip igmp limit** command to adjust the allowed number of IGMP joiners. If the exceeding of current limits was unexpected, find the IP address of the denied host in syslog.

Error Message

```
%IGMP-6-IGMP_GROUP_LIMIT: IGMP limit exceeded for group (*, [IP_address]) on
[chars] by host [IP_address]
```

Explanation The allowed number of IGMP joiners reached the configured limit. New joiners cannot be allowed unless the configuration is changed.

Recommended Action Use the global and/or interface **ip igmp limit** command to adjust the allowed number of IGMP joiners. If the exceeding of current limits was unexpected, find the IP address of the denied host in syslog.

Error Message

```
%IGMP_QUERIER-4-NO_IP_ADDR_CFG: The IGMP querier cannot send out General Query
messages in VLAN %d because there is no IP address configured on the system.
```

Explanation An IP address should be specified for the IGMP querier either at the global or per VLAN level.

Recommended Action Configure a source IP address for the IGMP querier.

Error Message

```
%IGMP_QUERIER-4-PIM_ENABLED: The IGMP querier is operationally disabled in VLAN
%d because PIM has been enabled on the SVI.
```

Explanation PIM has been detected on the SVI. The IGMP querier function should not be operationally enabled when PIM is enabled on the SVI.

Recommended Action Ensure that PIM is disabled on the SVI.

Error Message

```
%IGMP_QUERIER-4-QUERIER_MROUTER_DETECTED: An external IGMP querier or a multicast
router has been detected in VLAN %d on port %s.
```

Explanation An external querier or multicast router has been detected in the VLAN. The IGMP querier function should not be enabled when there is external querier or multicast router present in the VLAN.

Recommended Action Either manually disable the IGMP querier on this system or disable querier, or PIM/DVMRP on the multicast router(s) identified. The IGMP querier can be disabled either globally or on a per VLAN basis.

Error Message

```
%IGMP_QUERIER-4-SAME_SRC_IP_ADDR: An IGMP General Query packet with the same
source IP address (%i) is received in VLAN %d on port %s.
```

Explanation The IGMP querier has received an IGMP General Query message with a source IP address identical to that configured for the IGMP querier itself. This is considered a network configuration error.

Recommended Action Check IGMP querier source IP address configuration on the router or switch connected via the port identified.Ensure unique source IP addresses are configured on each system.

Error Message

```
%IGMP_QUERIER-4-SNOOPING_DISABLED: The IGMP querier is operationally disabled in
VLAN %d because IGMP snooping has been disabled in this VLAN.
```

Explanation IGMP snooping has been detected as being disabled on this VLAN. The IGMP querier function should not be operationally enabled when IGMP snooping is disabled.

Recommended Action Ensure that IGMP snooping is enabled globally and on the VLAN reported.

Error Message

```
%IGMP_QUERIER-4-VLAN_NOT_FWD: The IGMP querier is operationally disabled in VLAN
%d because VLAN is not in forwarding state.
```

Explanation The IGMP querier function is not be operationally enabled when VLAN is not forwarding.

Recommended Action Check spanning tree state for this VLAN.

Error Message

```
%IGMP_QUERIER-4-ZERO_SRC_IP_ADDR: An IGMP General Query packet with source IP
address that contained all zeroes is received in VLAN %d on port %s.
```

Explanation The IGMP querier has received an IGMP General Query message with a source IP address that contained all zeroes. Some IGMP clients cannot process General Query with source IP address that contained all zeroes.

Recommended Action Check the source IP address of the IGMP querier that is on the router or switch connected to the port specified in the message.

Error Message

```
%IGMP_QUERIER-6-NO_QUERIER_MROUTER_DETECTED: The IGMP querier is now
operationally enabled in VLAN %d because no external querier or multicast router
has been detected.
```

Explanation No external querier or multicast router has been detected. As a result, the IGMP querier function has now been enabled.

Recommended Action No action is required.

Error Message

```
%IGMP_QUERIER-6-PIM_DISABLED: The IGMP querier is now operationally enabled in
VLAN %d because PIM is no longer enabled on the SVI.
```

Explanation PIM has been disabled on the SVI and, as a result, the IGMP querier function has now been enabled.

Recommended Action No action is required.

Error Message

```
%IGMP_QUERIER-6-SNOOPING_ENABLED: The IGMP querier is now operationally enabled
in VLAN %d because IGMP snooping is no longer disabled.
```

Explanation IGMP snooping has now been enabled and, as a result, the IGMP querier function has now been enabled.

Recommended Action No action is required.

Error Message

```
%IGMP_QUERIER-6-VLAN_FWD: The IGMP querier is now operationally enabled in VLAN
%d because the VLAN has entered forwarding state.
```

Explanation The VLAN has been placed in the forwarding state and, as a result, the IGMP querier function has now been enabled.

Recommended Action No action is required.

IGMP_SNOOP_ISSU Messages

Error Message

```
%IGMP_SNOOP_ISSU-2-GET_BUFFER: IGMP Snooping ISSU client failed to get buffer for
message. Error: [dec] ([chars])
```

Explanation The Internet Group Management Protocol (IGMP) snooping In-Service Software Upgrade (ISSU) client has failed to get buffer space for building a negotiation message. A negotiation message cannot be sent to the standby device. If a problem occurs with the ISSU session negotiation, the standby device cannot be brought up properly.

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

Error Message

```
%IGMP_SNOOP_ISSU-2-INIT: IGMP Snooping ISSU client initialization failed to %s.
Error: %d (%s)
```

Explanation The IGMP Snooping ISSU client could not be initialized. This initialization failure must be addressed before in-service software upgrade or downgrade can be performed successfully. If you do not address this failure, there will be downtime during software upgrade or downgrade.

Error Message

```
%IGMP_SNOOP_ISSU-2-SEND_NEGO_FAILED: IGMP Snooping ISSU client failed to send
negotiation message. Error: %d (%s)
```

Explanation The IGMP Snooping ISSU client failed to send a session negotiation message to the peer device. If a problem occurs with the ISSU session negotiation, the standby device cannot be brought up properly.

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

Error Message

```
%IGMP_SNOOP_ISSU-2-SESSION_NEGO: IGMP Snooping ISSU client encountered unexpected
client nego_done. Error: %d (%s)
```

Explanation An ISSU-compliant client transitions through a series of internal states. The IGMP Snooping ISSU client encountered a 'client negotiation done' state that was unexpected. If a problem occurs with the ISSU session negotiation, the standby device cannot be brought up properly.

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

Error Message

```
%IGMP_SNOOP_ISSU-2-SESSION_REGISTRY: IGMP Snooping ISSU client failed to register
session information. Error: %d (%s)
```

Explanation The IGMP Snooping ISSU client failed to register session information. If a problem occurs with the ISSU session registration, the standby device cannot be brought up properly.

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

Error Message

```
%IGMP_SNOOP_ISSU-3-INVALID_SESSION: IGMP Snooping ISSU client does not have a
valid registered session.
```

Explanation The IGMP Snooping ISSU client does not have a valid registered session.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

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

Error Message

```
%IGMP_SNOOP_ISSU-3-MSG_NOT_OK: IGMP Snooping ISSU client 'Message Type %d' is not
compatible
```

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

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

Error Message

```
%IGMP_SNOOP_ISSU-3-MSG_SIZE: IGMP Snooping ISSU client failed to get the MTU for
Message Type %d. Error: %d (%s)
```

Explanation   The IGMP Snooping ISSU client failed to calculate the MTU for the specified message. The IGMP Snooping ISSU client is not able to send the message to the standby device.

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

Error Message

```
%IGMP_SNOOP_ISSU-3-SESSION_UNREGISTRY: IGMP Snooping ISSU client failed to
unregister session information. Error: %d (%s)
```

Explanation The IGMP Snooping ISSU client failed to unregister session information.

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

Error Message

```
%IGMP_SNOOP_ISSU-3-TRANSFORM_FAIL: IGMP Snooping ISSU client %s transform failed
for 'Message Type %d'. Error: %d (%s)
```

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

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

IGRP Messages

Error Message

```
%IGRP-3-NOSOCKET: Unable to open socket for AS [dec]
```

Explanation The requested operation could not be accomplished because of insufficient memory.

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

Error Message

`%IIFRP-3-MSGMAPINITFAILED: IIF Mapping database init failed`

Explanation Creating the local mapping database failed. this is fatal as nothing else could be done 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IIFRP-3-MSGREGISTERFAILED: Registering IIF Client failed with rc = %d`

Explanation The registration of IIF shim with SPI failed. This could be due to SPI failure

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

ILACC Messages

The following are ILACC driver messages.

Error Message

`%ILACC-1-INITFAIL: msgtxt_initfail`

Explanation The hardware failed to initialize correctly.

Recommended Action Repair or replace the controller.

Error Message

`%ILACC-1-MEMERR: msgtxt_memoryerror`

Explanation An Ethernet interface detected a hardware problem.

Recommended Action Repair or replace the controller.

Error Message

```
%ILACC-3-BADUNIT: msgtxt_badunit
```

Explanation An internal software error occurred.

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

Error Message

```
%ILACC-3-OWNERR: msgtxt_ownerror
```

Explanation An Ethernet interface is malfunctioning, or an internal software error occurred.

Recommended Action Repair or replace the controller.

Error Message

```
%ILACC-3-SPURIDON: Unit %d, spurious IDON interrupt, csr%d=0x%04x
```

Explanation An Ethernet interface generated a spurious Initialization Done interrupt.

Recommended Action Repair or replace the controller.

Error Message

```
%ILACC-3-UNDERFLO: Unit %d, underflow error
```

Explanation The Ethernet hardware is requesting data faster than the system can supply it. This condition might indicate that the system is at the limit of its performance.

Recommended Action A small number of underflows might not be a cause for concern. You can monitor underflows with the show interface command. Reducing the load on the router or installing a higher-performance router should alleviate this problem.

Error Message

```
%ILACC-4-BABBLE: Unit %d, babble error, csr0 = 0x%x
```

Explanation An Ethernet interface is malfunctioning.

Recommended Action Determine whether the malfunction stems from a software or hardware error by turning off all fast switching. Error messages showing that the packet is too large for the link indicate a software error at a high level. Copy the error message exactly as it appears, and report it to your technical support representative. Receiving no error messages indicates a hardware error. Repair or replace the controller.

Error Message

```
%ILACC-5-COLL: Unit %d, excessive collisions. TDR=%d
```

Explanation An Ethernet cable is broken or unterminated, or the transceiver is unplugged. The time delay reflectometer (TDR) counter is an internal ILACC counter that counts the time (in ticks of 100 ns each) from the start of a transmission to the occurrence of a collision. Because a transmission travels about 35 feet per tick, this value is useful to determine the approximate distance to a cable fault.

Recommended Action If the transceiver appears to be properly terminated, repair or replace the Ethernet interface card.

Error Message

```
%ILACC-5-LATECOLL: Unit %d, late collision error
```

Explanation An Ethernet transceiver is malfunctioning, the Ethernet is overloaded, or the Ethernet cable is too long.

Recommended Action Repair or replace the controller.

Error Message

```
%ILACC-5-LOSTCARR: Unit %d, lost carrier. Transceiver problem?
```

Explanation An Ethernet transceiver is unplugged or faulty.

Recommended Action Repair or replace the controller.

ILET Messages

Error Message

```
%ILET-1-AUTHENTICATION_FAIL: This Switch may not have been manufactured by Cisco
or with Cisco's authorization. This product may contain software that was copied
in violation of Cisco's license terms. If your use of this product is the cause
of a support issue, Cisco may deny operation of the product, support under your
warranty or under a Cisco technical support program such as Smartnet. Please
contact Cisco's Technical Assistance Center for more information.
```

Explanation ILET authentication failure

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

ILPM_FAULT Messages

Error Message

```
%ILPM_FAULT-4-ILPM_ERROR: Error  : [chars]
```

Explanation An error has occurred in the inline power management 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/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message

```
%ILPM_FAULT-5-ILPM_NOTICE: Notice: [chars]
```

Explanation This message provides information regarding inline power management.

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

Error Message

```
%ILPM_FAULT-5-ILPM_WARNING: Warning: [chars]
```

Explanation This message provides warning-level information regarding inline power management. In general, this message informs the user of a problem that has occurred as a result of an invalid configuration. The specific message text provides more details on the exact nature of the problem.

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

Error Message

%ILPOWER-3-CONTROLLER_ERR: Controller error, Controller number [dec]: [chars]

Explanation An error involving the inline power controller has occurred.

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

Error Message

%ILPOWER-3-CONTROLLER_IF_ERR: Controller interface error, [chars]: [chars]

Explanation An interface error has been detected between the inline power controller and 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/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%ILPOWER-3-CONTROLLER_PORT_ERR: Controller port error, Interface [chars]: [chars]

Explanation An port error has been reported by the inline power controller.

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

Error Message

```
%ILPOWER-3-CONTROLLER_POST_ERR: Inline Power Feature is disabled on this switch
because Power On Self Test (POST) failed on this switch. Please consult TECH
support for further assistance
```

Explanation An error reported or caused by the Power over Ethernet (PoE) controller is detected during POST.

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

Error Message

```
%ILPOWER-3-ILPOWER_INTERNAL_IF_ERROR: Inline Power internal error, interface
[chars]: [chars]
```

Explanation A software sanity check failed while processing inline power.

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

Error Message

```
%ILPOWER-3-SHUT_OVERDRAWN: Interface %s is shutdown as it is consuming more than
the maximum configured power (%d) milliwatts.
```

Explanation Interface is shutdown because it is consuming more than the maximum configured power

Recommended Action Make sure correct power is budgeted for this interface based on the power device electrical specifications or ratings. It is recommended to change the police cutoff power to a higher value to keep the device powered on

Error Message

`%ILPOWER-4-LOG_OVERDRAWN: Interface %s is overdrawing power. it is consuming %d`
`milliwatts where as maximum configured power is (%d) milliwatts.`

Recommended Action Make sure correct power is budgeted for this interface based on the power device electrical specifications or ratings. Otherwise you might risk overloading the switch. It is recommended to change the police cutoffpower appropriately if needed

Error Message

`%ILPOWER-5-AC_DISCONNECT: Interface [chars]: AC disconnect`

Explanation The AC power has been disconnected.

Recommended Action No action is required.

Error Message

`%ILPOWER-5-CLR_OVERDRAWN: Interface %s is NOT overdrawing power. it is consuming`
`%d milliwatts where as maximum configured value is (%d) milliwatts.`

Recommended Action No action is required.

Error Message

`%ILPOWER-5-DC_DISCONNECT: Interface [chars]: DC disconnect`

Explanation The DC power has been disconnected.

Recommended Action No action is required.

Error Message

`%ILPOWER-5-IEEE_DISCONNECT: Interface %s: PD removed`

Explanation The powered device is no longer connected to the switch, or the connected powered device is being powered by an external AC power source. The switch is no longer providing power on the interface.

Recommended Action No action is required.

Error Message

`%ILPOWER-5-ILPOWER_POWER_CDP_SHUT: Interface %s: inline power shut`

Explanation Inline power is shut because cdp consumption power on this Power over Ethernet (PoE) port is greater than 1. allocation power or 2. hardware interface limit or 3. user configured max power or 4. available power on this switch.

Recommended Action No action is required.

Error Message

```
%ILPOWER-5-ILPOWER_POWER_DENY: Interface [chars]: inline power denied
```

Explanation   There is not enough power left in the system to supply to the interface specified in the error message.

Recommended Action   No action is required.

Error Message

```
%ILPOWER-5-INVALID_IEEE_CLASS: Interface %s: has detected invalid IEEE class: %d
device. Power denied
```

Explanation   The power device has invalid IEEE class. switch won't powerup the device

Recommended Action   No action is required.

Error Message

```
%ILPOWER-5-LINKDOWN_DISCONNECT: Interface [chars]: Link down disconnect
```

Explanation   A link has been disconnected.

Recommended Action   No action is required.

Error Message

```
%ILPOWER-5-POLICE_POWER_INVALID: Interface %s: invalid power police %d milliwatts
current %d mA voltage %d mV
```

Explanation   power policing current or voltage value is invalid.

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

Error Message

```
%ILPOWER-5-POWER_GRANTED: Interface [chars]: Power granted
```

Explanation   Power has been granted for the interface specified in the message text.

Recommended Action   No action is required. IMAGEMGR Messages

Recommended Action   The following are Archive Download Module messages.

Error Message

```
%ILPOWER-5-SENSE_POWER_INVALID: Interface %s: invalid power sense %d milliwatts
current %d mA voltage %d mV
```

Explanation power sensing current or voltage value is invalid.

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

Error Message

```
%ILPOWER-7-DETECT: Interface [chars]: Power Device detected: [chars]
```

Explanation A power device has been detected.

Recommended Action No action is required.

Error Message

```
%ILPOWER_ISSU-3-GET_BUFFER: Inline power ISSU client failed to get buffer for
message. Error: %d (%s)
```

Explanation Inline power ISSU client failed to get buffer for building a negotiation message. Hence, it cannot send the negotiation message to the standby unit. When there is a problem in the negotiaiton the standby unit can not be brought up.

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

Error Message

```
%ILPOWER_ISSU-3-INIT: Inline power ISSU client initialization failed to %s. Error:
%d (%s)
```

Explanation Inline power ISSU client could not be initiailzed, this will cause catstrophic failure when ISSU upgrade or downgrade is performed.

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

Error Message

```
%ILPOWER_ISSU-3-INVALID_SESSION: Inline power ISSU client does not have a valid
registered session.
```

Explanation Inline power ISSU client does not have a valid registered session. When there is a problem with the session the standby unit cannot be brought up.

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

Error Message

```
%ILPOWER_ISSU-3-MSG_NOT_OK: Inline power ISSU client message type %d is not
compatible
```

Explanation Inline power ISSU client received an incompatible message from the peer unit. Since the message is not compatible it cannot be processed by this unit

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the commands and your pertinent troubleshooting logs. (show issu message group and show issu session and show issu negotiated version)

Error Message

```
%ILPOWER_ISSU-3-MSG_SIZE: Inline power ISSU client failed to get the MTU for
message type %d. Error: %d (%s)
```

Explanation Inline power ISSU client failed to calculate MTU for the message specified. The dot1x ISSU client will not be able to send message to the standby unit.

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

Error Message

```
%ILPOWER_ISSU-3-SEND_NEGO_FAILED: Inline power ISSU client failed to send
negotiation message. Error: %d (%s)
```

Explanation Inline power ISSU client failed to send a session negotiation message to the peer. When there is a problem in the ISSU negotiation the standby unit can not be brought up.

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

Error Message

```
%ILPOWER_ISSU-3-SESSION_NEGO: Inline power ISSU client encountered unexpected
client nego_done. Error: %d (%s)
```

Explanation Inline power ISSU client encountered an unexpected 'client negotiation done'.

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

Error Message

```
%ILPOWER_ISSU-3-SESSION_REGISTRY: Inline power ISSU client failed to register
session information. Error: %d (%s)
```

Explanation Inline power ISSU client failed to register session information. When there is a problem with the session the standby unit cannot be brought up.

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

Error Message

```
%ILPOWER_ISSU-3-SESSION_UNREGISTRY: Inline power ISSU client failed to unregister
session information. Error: %d (%s)
```

Explanation Inline power ISSU client failed to unregister session information.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the commands and your pertinent troubleshooting logs. (show issu session and show issu negotiated capability)

Error Message

```
%ILPOWER_ISSU-3-TRANSFORM_FAIL: Inline power ISSU client %s transform failed for
message type %d. Error: %d (%s)
```

Explanation Inline power ISSU client could not transform the message. If the transmit transformation failed, it means that the checkpoint message can not be sent to the standby unit. If the receive transformation failed, it means that the checkpoint message can not be applied on the standby unit. In both cases the Inline power state will not be indentical with the active unit.

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

IMA Messages

Error Message

```
%IMA-1-BAD_CMD: Command opcode %#x on channel %d on slot %d was rejected.
```

Explanation The IMA firmware has rejected the command because of the current protocol state of the interface, or the opcode is undefined.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IMA-1-DISCOVER: The Network Module in slot %d did not initialize.
```

Explanation   The Network Module has failed its initialization.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IMA-1-DOWNLOAD_FAILED: Download of %s to failed to at %#x on IMA Network Module
in slot %d.
```

Explanation   An error occured during the download of firmware to the IMA NM.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IMA-1-FPGA_DOWNLOAD_FAIL: FPGA Download on module in slot %d failed.
```

Explanation   An error occured during the download of the FPGA on the IMA NM.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IMA-1-INVALID_PCI_ID: The Network Module in slot %d reports an invalid %s device id of %#x.

Explanation   The IMA network module hardware may be bad.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IMA-1-MAILBOX_FULL: The mailbox for channel %d on IMA Network Module in slot %d is completely full. Message %d was dropped.

Explanation   The IMA NM mailboxes are full and cannot accept any more requests.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IMA-1-NETWORK_PROCESSOR_NOT_READY: Network processor on module in slot %d failed to come up.

Explanation   An error occured during reset of the IMA NM.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IMA-1-NO_ATM_CHANNEL_AVAILABLE: Delaying activation of %s until a currently
active interface is shutdown.
```

Explanation The IMA network module cannot only support up to 4 activate interfaces at one time. Once more that 4 are no shutdown, each interface will wait for an existing interface to be shutdown before becoming activated.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IMA-1-NO_MAIL_REPLY: Timed out waiting for a response to command %#x from slot %d.
```

Explanation The IMA NM failed to respond with the requested information. Information to be displayed by requesting exec command or SNMP manager is incomplete. This is an extremely rare event and should only happen under severe system load.

Recommended Action If the error 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IMA-1-PCMCIA: The IMA Network Module in slot %d is incompatible with the PCMCIA
controller in the router.
```

Explanation The PCMCIA controller is down level.

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

Error Message

```
%IMA-1-PROCESS_NEVER_RECEIVED_MAIL_REPLY: Previous process %d never received mail
response from slot %d.
```

Explanation The previous requesting process was terminated before receiving a mail reply.

Recommended Action If the error 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IMA-1-SHARED_MEMORY_ERROR: Module in slot %d had a shared memory error.
```

Explanation Memory on the NM failed power-on diagnostic check.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IMA-4-CLOCK_MODE_COMMON_DELAY: Link [chars] will become the common transmit clock
once it is added to group [chars].
```

Explanation The link configured as the common transmit clock is not a member of the group, so it cannot provide the clock. The group will use a common transmit clock that is automatically chosen from one of the other active links.

Recommended Action No action is required.

Error Message

```
%IMA-4-CLOCK_MODE_COMMON_DELAYED: Link %d will become the common transmit clock
once it is added to group %s
```

Explanation The link configured as the common transmit clock is not a member of the group, so it cannot provide the clock. The group will use a common transmit clock that is automatically chosen from one of the other active links.

Recommended Action No action is required.

Error Message

```
%IMA-4-CLOCK_MODE_COMMON_SWITCH: Switching common transmit clock for group
[chars] to link [chars].
```

Explanation The link providing the common transmit clock has been removed from the group, so it cannot provide the clock. The group will use a common transmit clock that is automatically chosen from one of the other active links.

Recommended Action No action is required.

Error Message

```
%IMA-4-TEST_LINK_DELAY: Link [chars] will initiate the test pattern procedure once
its added to group [chars].
```

Explanation The link chosen to transmit the test pattern is not a member of the group, thereby preventing the transmission of the test pattern.

Recommended Action No action is required.

Error Message

```
%IMA-4-TEST_LINK_DELAYED: Link %d will initiate the test pattern procedure once
its added to group %s.
```

Explanation The link chosen to transmit the test pattern is not a member of the group, thereby preventing the transmission of the test pattern.

Recommended Action No action is required.

Error Message

```
%IMA-4-TEST_LINK_STOPPED: Stopping test pattern procedure on group %s.
```

Explanation The link transmitting the test pattern has been removed from the group, thereby stopping the transmission of the test pattern.

Recommended Action No action is required.

Error Message

```
%IMA-5-ACTIVE_LINK_CHANGE: IMA Group %s now has %d active links, active link
bitmap is %#x.
```

Explanation Active Links were added or removed from the Group, changing its bandwidth.

Recommended Action No action is required.

Error Message

`%IMA-5-NO_LINK_MEMBERS: %s is using channel %d but has no configured links.`

Explanation The IMA interface has been configured Up but has no link members. It cannot become active until active links are added to the group.

Recommended Action No action is required.

IMAGEMGR Messages

Error Message

`%IMAGEMGR-6-AUTO_ADVISE_SW: [chars]`

Explanation This message provides output from the "auto-advise-software" process.

Recommended Action No action is required.

Error Message

`%IMAGEMGR-6-AUTO_ADVISE_SW_INITIATED: Auto-advise-software process initiated for switch number(s) [chars]`

Explanation Systems that contain incompatible software have been detected in the stack. The stack will now determine whether or not software is available to be copied to the incompatible systems, and if so, advise the user how to copy it. Otherwise, the system will let the user know that the software on the stack requires updating.

Recommended Action No action is required.

Error Message

`%IMAGEMGR-6-AUTO_COPY_SW: [chars]`

Explanation This message provides output from the "auto-copy-software" process.

Recommended Action No action is required.

Error Message

`%IMAGEMGR-6-AUTO_COPY_SW_INITIATED: Auto-copy-software process initiated for switch number(s) [chars]`

Explanation Systems that contain incompatible software have been detected in the stack. The stack will now determine whether or not software is available to be copied to the incompatible systems, and whether or not it is appropriate to copy the software automatically.

Recommended Action No action is required.

Error Message

`%IMAGEMGR-6-AUTO_DOWNLOAD_SW: [chars]`

Explanation This message provides output from the "auto-download-software" process.

Recommended Action No action is required.

Error Message

`%IMAGEMGR-6-AUTO_DOWNLOAD_SW_INITIATED: Auto-download-software process initiated for switch number(s) [chars]`

Explanation Systems that contain incompatible software have been detected in the stack. The stack will now attempt to download software from a previously-configured location and install it to make the systems compatible.

Recommended Action No action is required.

IMAGE Messages

Error Message

`%IMAGE_SIMFS-3-NOPROCESS: Failure spawning Memory Reclaim process`

Explanation The creation of an IOS process to compact memory previously held by In-Memroy Image files failed. It is probably due to a software defect

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

Error Message

`%IMAGE_VFS-3-CHECKSUM_FAIL: %s image checksum mismatch.`

Explanation The checksum of the image in memory is different from the expected checksum

Recommended Action Check whether the image file is complete and uncorrupted

Error Message

`%IMAGE_VFS-3-LOAD_FAIL: Failed to locate all the Image files,on bootup`

Explanation The relevant image file is missing or it couldn't be extracted(due to corruption), or the router has insufficient memory to load the entire image

Recommended Action If the TAR file is part of a system image, enter the show image contents file archive-name, where archive-name is the name of the archive. Enter the show region and show version commands. Open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered.

Error Message

`%IMAGE_VFS-3-LOCATE_FAIL: Failed to open %s, which was loaded from archive %s`

Explanation The relevant image file is missing or it could'nt be extracted(due to corruption), or the Archive itself is missing(In case of Flash based access)

Recommended Action If the file is not in memory, check the archive file. If the file is a TAR archive file and not part of a system software image, enter the archive tar table archive-name command, where archive-name is the name of the TAR archive. If the TAR file is part of a system image, enter the show image contents file archive-name, where archive-name is the name of the archive. Enter the dir all and show version commands. Open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered.

Error Message

`%IMAGE_VFS-3-NOPROCESS: Failure spawning No Cache process`

Explanation The creation of an IOS process to delete in-memory Image files failed.

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

Error Message

```
%IMAGE_VFS-3-VERIFY_FAIL: archive verification failed for file %s archive %s.
```

Explanation The archive in the local device is different from the version whose image file has been loaded into memory. This can happen if the archive was deleted from the local device /or replaced by another file of the same name

Recommended Action Check whether the archive file is complete and uncorrupted.Also check if the size of the archive   the last modification time (if available) is what you expect it to be. Enter the dir all and show version commands.

Error Message

```
%IMAPAM-6-LOG: [chars]
```

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

```
%IMA_LINK-3-LCD: [chars] [chars] [chars] [chars] [chars]
```

Explanation A loss of cell delineation has occurred on the user or network side of the IMA link. The local loop or switch of the carrier, or the router or other CPE equipment of the user has failed.

Recommended Action Check the ATM link layer and IMA configurations for accurate HEC or cell delineation settings, or copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

INBAND Messages

Error Message

```
%INBAND-3-BAD_PAK: Possibly un-encapsulated packet passed to Mistral: int %s type
%u stat 0x%x flags 0x%x size %d offset %d requeue_token %u r1 %u r2 %u total
detected %u
```

Explanation Badly encapsulated packet from process level

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%INBAND-3-INVALID_SEND: Invalid send operation (packet on [chars])`

Explanation   Internal error caused illegal call to device driver: normal operation continues.

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

Error Message

`%INBAND-3-INV_TX_PACKET: [chars]: packet neither on IBL nor on OBL`

Explanation   The packet to be transmitted is neither on the IBL nor on the OBL.

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

Error Message

`%INBAND-3-NOBUF: Dropping the packet.`

Explanation   The system controller receive buffer pool has been exhausted. No further input packets can be handled until some buffers are returned to the pool.

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

Error Message

```
%INBAND-3-NO_BUFFER_POOLS: Initialization of private buffer pools failed
```

Explanation   Private buffer pools not created for ETSEC ibc.

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

Error Message

```
%INBAND-3-TOOBIG: An attempt made to send giant packet on [chars] ([dec] bytes
from [hex], max allowed [dec])
```

Explanation   An attempt was made to send an oversized packet.

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

Error Message

```
%INBAND-6-BAD_IDB: Bad idb for vector [chars]: [chars] vlan [dec] total [dec]
```

Explanation   An incorrect IDB was returned from the "get_l3_swidb" object.

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

Error Message

```
%INBAND_or_EOBC-3-INVALID_SEND: Invalid send operation (packet on [chars])
```

Explanation   Unavailable.

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

INDXOBJ Messages

Error Message

```
%INDXOBJ-3-ADD_ERROR: index add for [chars] failed: [chars]
```

Explanation   Index object routine error.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%INDXOBJ-3-INTERRUPT: index object routine %s called from interrupt context
```

Explanation   inappropriate index object routine called from interrupt routine.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%INLINE_CRYPTO_MOD-0-SELF_TEST_FAILURE: Encryption self-test failed ([chars])

Explanation   One of the encryption self-tests has failed. The encryption engine is not operable in this state.

Recommended Action   If the failure persists, contact your Cisco technical support representative to obtain a replacement Cisco IOS software image.

Error Message

%INLINE_CRYPTO_MOD-1-ICD_INSTALL_ERROR: [chars]

Explanation   An error occurred during the initialization of the VPN Module.

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

Error Message

%INLINE_CRYPTO_MOD-1-NOMEMORY: Creation of [chars] failed.

Explanation   The VPN Module driver could not allocate memory for the specified data structure. The crypto device will not work properly.

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

Error Message

%INLINE_CRYPTO_MOD-6-SHUTDOWN: [chars] shutting down

Explanation   The specified VPN Module is shutting down. This action was initiated from the CLI.

Recommended Action   No action required. INSTANCE_LOG Messages

Recommended Action   The following are Instance Log messages.

Error Message

`%INSTANCE_LOG-3-WRITEERROR: [chars]`

Explanation A write error occurred while saving the instance log.

Recommended Action Retry the operation with a different URL. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. INTERFACE_API Messages

Recommended Action The following are Interface descriptor block binary API messages.

Error Message

`%INSTANCE_LOG-5-NODATA: [chars]`

Explanation The control plane message log is empty.

Recommended Action No action is required.

Error Message

`%INSTANCE_LOG-5-OPENFAIL: [chars]`

Explanation The indicated file could not be opened.

Recommended Action Retry the operation with a usable URL.

INT Messages

Error Message

`%INT-0-ADDFAST: Add: Invalid fast io code [dec]`

Explanation A request was made to add an interrupt handler to the fast I/O path with an invalid interrupt type. This is a fatal internal logic error.

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

Error Message

```
%INT-0-ADDFLIH: Add: Invalid interrupt code [dec]
```

Explanation A request was made to add an interrupt handler with an invalid interrupt number. This is a fatal internal logic error.

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

Error Message

```
%INT-0-ADDFULL: Add: Invalid full io code [dec]
```

Explanation A request was made to add an I/O interrupt handler with an invalid interrupt code. This is a fatal internal logic error.

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

Error Message

```
%INT-0-ADDTRAP: Add: Invalid trap code [dec]
```

Explanation A request was made to add a system call handler with an invalid system call number. This is a fatal internal logic error.

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

Error Message

```
%INT-0-REMOVEFAST: Remove: Invalid fast io code [dec]
```

Explanation A request was made to remove an interrupt handler from the fast I/O path with an invalid interrupt type. This is a fatal internal logic error.

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

Error Message

```
%INT-0-REMOVEFLIH: Remove: Invalid interrupt code [dec]
```

Explanation A request was made to remove an interrupt handler with an invalid interrupt number. This is a fatal internal logic error.

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

Error Message

```
%INT-0-REMOVEFULL: Remove: Invalid full io code [dec]
```

    Explanation A request was made to remove an I/O interrupt handler with an invalid interrupt code. This is a fatal internal logic error.

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

Error Message

```
%INT-0-REMOVETRAP: Remove: Invalid trap code [dec]
```

    Explanation A request was made to add a system call handler with an invalid system call number. This is a fatal internal logic error.

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

INTERFACE_API Messages

The following are messages for the Binary API for the interface descriptor block.

Error Message

```
%INTERFACE_API-1-NAMESTRTOOLONG: Interface name [chars].[int] exceeded maximum
allowed length [dec]
```

    Explanation An internal software error has occurred.

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

Error Message

```
%INTERFACE_API-1-NOMOREHWIDBNUMBERS: No more hardware IDB numbers can be issued.
The maximum allowed numbers, [dec], has been reached for this platform.
```

Explanation   No more hardware IDB numbers can be issued. The maximum allowed number has been reached for this platform.

Recommended Action   In addition to the following, copy the information from **show idb**. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%INTERFACE_API-1-NOMORESWIDB: No more SWIDB can be allocated, maximum allowed %d
```

Explanation   No more Interfaces can be created because the maximum number of SWIDB allowed for this platform has been reached

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%INTERFACE_API-1-NOMORESWIDBNUMBERS: No more software IDB numbers can be issued.
The maximum allowed numbers, [dec], has been reached for this platform.
```

Explanation   No more software IDB numbers can be issued. The maximum allowed numbers has been reached for this platform.

Recommended Action   In addition to the following, copy the information from the **show idb** 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. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%INTERFACE_API-3-BADIDBSTATUSCHANGECALL: Invalid function call at interrupt
level.
```

Explanation An internal function was illegally called at interrupt level. This error might be caused by incorrectly coded creation or deletion of an interface, or during an OIR operation.

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

Error Message

```
%INTERFACE_API-3-CANNOTGETMTU: Error [dec] received while getting MTU: [chars].
Using default [int]
```

Explanation A software error occurred while the MTU value was being retrieved from the interface.

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

Error Message

```
%INTERFACE_API-3-HWIDBQREENTRANT: %s in progress of being inserted/removed,
ignoring new request to %s
```

Explanation A software error has occurred while attempting to insert or remove the interface into the system as there's already another attempt in progress to insert or remove this interface. The first attempt must complete before a new attempt can be started. The user should retry this operation at a later time.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

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

Error Message

```
%INTERFACE_API-3-IFNUMTOIDBERROR: Error occurred while using the ifnum to idb
table for interface [chars], if number [dec], during [chars]
```

Explanation   A software error has occurred. This message is displayed when an operation on the
if_number to idb mapping table could not be performed successfully.

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

Error Message

```
%INTERFACE_API-3-INVALIDSUBBLOCKPARAMETERS: Invalid subblock parameters for
[chars] were supplied.
```

Explanation   An internal software error has occurred.

Recommended Action   Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

```
%INTERFACE_API-3-NOADDSUBBLOCK: The [chars] subblock named [chars] was not added
to [chars]
```

Explanation   A software error has occurred. IDB subblocks could not be added.

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

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

Error Message

%INTERFACE_API-3-NODESTROYSUBBLOCK: The %s subblock named %s was not removed

Explanation   A software error has occured, this message is displayed when IDB subblocks cannot be removed.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%INTERFACE_API-3-NOSUBBLOCK: [chars] subblock does not exist on interface [chars]

Explanation   An internal software error occurred.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%INTERFACE_API-3-SUBNUMDBERR: subnum [hex] error in [chars]

Explanation   A software error has occurred. A problem has occurred with a "sub_number db" operation.

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

Error Message

```
%INTERFACE_API-4-BADPAKINPUT: pak-if_input is not initialized on interface %s
```

Explanation   An internal software error occurred.

Recommended Action   If the error 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%INTERFACE_API-4-BADPAKOUTPUT: pak-if_output is not initialized on interface %s
```

Explanation   An internal software error occurred.

Recommended Action   If the error 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%INTERFACE_API-4-BADPOINTER: Function %s detected an invalid %s pointer of %08lX,
ignoring
```

Explanation   A software error has occurred, this message is displayed when an invalid pointer is detected.

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

Error Message

`%INTERFACE_API-4-BADSWIDB: %s may not be referencing the correct swidb`

Explanation   An internal software error occurred.

Recommended Action   If the error 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%INTERFACE_API-4-TBLERROR: A error occurred while using the Index Table utility for [chars].`

Explanation   A software error has occurred. An index table feature could not be successfully used.

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

INTF_SYNC Messages

The following are interface synchronization RF subsystem messages.

Error Message

`%INTF_SYNC-2-INITSYS: [chars]`

Explanation   A software error occurred during initialization of the interface synchronization RF subsystem.

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

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

Error Message

```
%INTF_SYNC-3-INVALID_MSG: Incorrectly formatted message ([hex], [hex]) received
by [chars]
```

Explanation Inconsistent message data was received from the peer CPU. This error is probably due to an incompatible image version.

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

Error Message

```
%INTF_SYNC-3-NO_BUFFER: Unable to transmit message type [dec] from [chars]
```

Explanation A transmit error occurred while a message was being sent to the other CPU. This error is probably due to nonavailability of a buffer.

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

Error Message

```
%INTF_SYNC-3-TRANSMIT_ERROR: Unable to transmit message type [dec] from [chars]
```

Explanation A transmit error occurred while a message was being sent to the other CPU. This error is probably due to message translation.

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

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

Error Message

%INTF_SYNC-3-UNKNOWN_MSG: Unknown message type [hex] received by [chars]

Explanation   An unknown message type was received from the peer CPU. This error is probably due
to an incompatible image version.

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

Error Message

%INTF_SYNC-5-UNSUPPORTED_MSG: Msgtype [chars] sent by [chars] unsupported by peer.

Explanation   The peer CPU responded that it did not recognize a message sent by this CPU. This error
is probably due to a mismatch of image version.

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

Error Message

%INTR_MGR-3-BURST: [chars] [chars] [dec]

Explanation   A burst of hardware interrupts of the type indicated has occurred.

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

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

Error Message

```
%INTR_MGR-3-INTR: [chars] [chars]
```

Explanation   The specified interrupt event has been detected.

Recommended Action   The message text on the system console or in the system log provides more information on the specific nature of the error. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%INTR_MGR-3-MAXBURST: [chars] [chars] [dec]
```

Explanation   The specified hardware interrupt has exceeded the maximum allowed number of bursts.

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

IOCARD Messages

Error Message

```
%IOCARD-3-IONOT0: IO card discovered in non-zero slot [dec]
```

Explanation   An I/O card was detected in a nonzero slot.

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

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

Error Message

%IOCARD-3-UNSUPPORTED: [chars] in slot[dec] is not supported on [chars] chassis

Explanation   The software has identified and disabled the FE on the I/O card.

Recommended Action   No action is required.

IOCTRL Messages

Error Message

%IOCTRL-3-GPIO_ERROR: GPIO R/W Error: [chars]

Explanation   The specified General Purpose I/O (GPIO) operation sourced from the system IO controller failed. The GPIO is a hardware interface used to manipulate various devices in the system. One good example is the visible LED. This GPIO failure is due to an unexpected internal software error. The result of this failure may be significant or insignificant, depending on the specific GPIO device that failed.

Recommended Action   The debug command output information will be helpful to identify the specific error. Enter the debug platform io-controller gpio command to display additional GPIO information. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IOCTRL-3-HSIB_ERROR: IO Controller Node [dec] : [chars]

Explanation   An error was detected on the System IO controller internal bus. The system IO controller internal bus provides the internal connections between the hardware functional blocks of the IO controller. This is unexpected and is a serious and abnormal condition that will result in reduced functionality.

Recommended Action   This may be a transient error. Reload the system and try again. If the issue recurs, then the problem is likely due to a hardware or software failure and further action is required as specified below. Enter the show platform io-controller hsib command when the error occurs to get additional debug information. The output of the commands entered after the condition has occurred will also be useful. If this message recurs, Copy the message exactly as it appears on the

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

Error Message

```
%IOCTRL-3-I2C_ERROR: I2C R/W Error accessing device on io-controller I2C bus [dec]
: [chars]
```

Explanation The specified Inter-Integrated Circuit (I2C) operation sourced from the system IO controller failed. The I2C, also known as the 2 wire serial bus, is used to configure internal subsystems connected to the system IO controller. The failure can be due to a device not operating properly, a transient error, or a software failure. The symptoms of the failure are unpredictable, and may cause partial or complete failure of single or multiple functions of the system. This is a serious and abnormal condition that requires the user to take immediate action.

Recommended Action This may be a transient error due to improperly seated interface cards. All interface cards should be reseated and the system reloaded. If the issue recurs, then the problem is probably due to a hardware or software failure and further action is required. Additional debug information can be obtained by issuing the debug serial command before entering the configuration information for any configured serial interfaces. Collect the output of the commands entered after the condition has occurred. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOCTRL-3-SCC_DMA_ERROR: SCC Channel [dec]: [chars] DMA Error Occured
```

Explanation The Serial Communications Controller (SCC) timed out while setting up the DMA. This is due to an incomplete response from the SCC status of the system IO controller, indicating that the system IO controller did not respond in time, or with the expected status result. This is a serious and abnormal condition that will result in reduced functionality of the configured serial interfaces.

Recommended Action A different or limited configuration can be tried for the serial interfaces as a temporary workaround. This may also be a transient error, therefore the system should be reloaded to try again. If the issue recurs, further action is required. Enter the debug serial command before entering the serial interface configuration information.

Error Message

%IOCTRL-3-SPI_ERROR: Serial Peripheral Bus Error: [chars]

Explanation The specified SPI operation sourced from the system IO controller failed. SPI, also known as Serial Peripheral Bus, is a hardware interface used to manipulate the attached WIC interfaces. This error occurred due to a failure to access the device properly. This is unexpected and significant. The system will not work properly and action must be taken.

Recommended Action This may be a transient error due to improperly seated interface cards. All interface cards should be reseated and the system reloaded. If the issue recurs, then the problem is probably due to a hardware or software failure and further action is required. Enter the debug serial command before entering the configuration information for any configured serial interface to gather data that might help identify the nature of the message. Collect the output of the commands entered after the condition has occurred. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IOCTRL-3-TDM_CONNECT: TDM connection failed from interface [dec]/[dec]/[dec]

Explanation An internal TDM connection between the interface and the mainboard switch fabric failed during the connect phase. This failure occurred due to an internal software error. This is a serious and abnormal condition that will result in reduced function for the configured interface.

Recommended Action A different or limited configuration can be tried for the interface as a temporary workaround. Enter the debug tdm command before entering the configuration information for the interface to obtain additional debug information.

Error Message

%IOCTRL-3-TDM_DISCONNECT: TDM disconnection failed from interface [dec]/[dec]/[dec]

Explanation An internal TDM connection between the interface and the mainboard switch fabric failed during the disconnect phase. This is due to an internal software error. This is a serious and abnormal condition that will result in reduced function for the configured interface.

Recommended Action A different or limited configuration can be tried for the interface as a temporary workaround. Enter the debug tdm command before entering the configuration information for the interface to obtain additional debug information.

Error Message

```
%IOCTRL-3-TIMER_NO_START: System IO Controller timer [dec] failed to start
```

Explanation A hardware based timer in the system IO controller failed to start. System IO controller timers are generally used to create periodic monitoring events on serial interfaces or voice ports. This is due to an incomplete response from the system IO controller hardware, or improper software interpretation of the hardware status of the timer. Without a started timer, the serial interfaces or the voice ports will not operate properly. This is a serious and abnormal condition that will result in reduced function for the configured serial interfaces or the voice ports.

Recommended Action This may be a transient error. Reload the system. If the issue recurs, further action is required.

Error Message

```
%IOSXE_INFRA-3-APP_SESS_OPEN_FAILED: An attempt to open %s with handle number %d
has failed (%d)
```

Explanation Application session between processes failed to estabish.

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

Error Message

```
%IOSXE_INFRA-3-CONSOLE_DBUG_DROP: System dropped %d bytes of console debug
messages.
```

Explanation Debugging messages are being generated faster than they can be displayed on the console. The messages can not be guaranteed to be seen so this message replaces the lost messages.

Recommended Action Consider using conditional debugging or turning off console logging.

Error Message

```
%IOSXE_INFRA-3-EOBC_SOCK: Socket event for %s
```

Explanation An internal socket level event has returned an error which is indicated. This may have been the result of a bind, peek, receive or send operation with respect to the EOBC interface listed.

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

representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show eobc** and **show platform software infrastructure bipc** commands and your pertinent troubleshooting logs.(show eobc, show platform software infrastructure bipc)

Error Message

%IOSXE_INFRA-3-IFS_DFLT_FS_REG_FAIL: Unable to set %s as a default file system.

Explanation ASR1000's platform dependent code failed to register the default file system.

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

Error Message

%IOSXE_INFRA-3-IFS_EXTLINK_ADD_FAIL: Could not add filesystem %s to IFS links

Explanation Attempt to add filesystem root to allow for links failed

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

Error Message

%IOSXE_INFRA-3-IFS_UDEV_REMOVE_FAIL: Could not remove udev device %s

Explanation Attempt to remove udev device failed

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

Error Message

`%IOSXE_INFRA-3-INJECT_FEATURE_ESS_ERR: ESS segment not found, type %d hdl 0x%8x`

Explanation Packets to be injected to an unsupported ESS segment

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

Error Message

`%IOSXE_INFRA-3-INJECT_GSB_CTL_INIT_FAIL: Inject adjacency subblock init failed`

Explanation Adj subblock control or register failed

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

Error Message

`%IOSXE_INFRA-3-INJECT_HDR_LENGTH_ERR: Inject hdr size %u exceeds limit`

Explanation Inject header length exceeds pak header space

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

Error Message

`%IOSXE_INFRA-3-INVALID_ERRMSG: Error message type %d not defined`

Explanation Error message type used is not defined in ASR1000infrastruction

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

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

Error Message

```
%IOSXE_INFRA-3-INVALID_RUNTIME_IDX: Thread runtime index %d is not valid
```

Explanation   Export the thread's running time failed.

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

Error Message

```
%IOSXE_INFRA-3-PUNT_ADDR_RES_ENCAP_ERR: Punted address resolution packet with
unknown encap %s
```

Explanation   Punted packet for ARP/ND with encap not supported

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

Error Message

```
%IOSXE_INFRA-3-PUNT_INCOMP_WRONG_ADJID: Punted address resolution packet linktype
%s, adj-id %d is with linktype %s
```

Explanation   CPP needs to punt incomplete adjacency for resolution by specifying the adjacency-id,
but the included adjacency-id does not match the incomplete adjacency this packet triggered.

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

Error Message

`%IOSXE_INFRA-3-PUNT_SVC_PROC_ERR: Punt service %s create failed`

Explanation   Punt service process can not be created

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

Error Message

`%IOSXE_INFRA-3-PUNT_SVC_TYPE_UNKNOWN: Punted packet with unknown service type %u`

Explanation   Punted pak with an unsupported service type

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

Error Message

`%IOSXE_INFRA-3-SHIM_INIT_MEM_FAIL: ASR1000 shim layer initialization failed: Memory initialization failed.`

Explanation   ASR1000 IOS shim layer initialization of memory failed

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

Error Message

```
%IOSXE_INFRA-3-SHIM_INIT_PROC_FAIL: ASR1000 shim layer initialization failed:
Dispatch process creation failed
```

Explanation ASR1000 IOS shim layer initialization creating dispatch process failed

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

Error Message

```
%IOSXE_INFRA-3-SHIM_INIT_TDL_FAIL: ASR1000 shim layer initialization TDL Lib %s
failed.
```

Explanation ASR1000 IOS shim layer initialization of TDL library

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

Error Message

```
%IOSXE_INFRA-3-SHIM_INIT_WQ_CHASFS_FAIL: ASR1000 shim layer initialization
failed: Can not create receiving chasfs watched queue
```

Explanation ASR1000 IOS shim layer initialization of watched queue failed

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

Error Message

```
%IOSXE_INFRA-3-SHIM_INIT_WQ_FAIL: ASR1000 shim layer initialization failed: Can
not create receiving queues
```

Explanation   ASR1000 IOS shim layer initialization of watched queue failed

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

Error Message

```
%IOSXE_INFRA-3-SHIM_NO_IPC_DISPATCH_HDL: ASR1000 shim layer %s process message
without IPC dispatch handler.
```

Explanation   ASR1000 IOS shim layer has no ipc dispatch handler set

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

Error Message

```
%IOSXE_INFRA-3-SHIM_NO_IPC_STATUS_HDL: ASR1000 shim layer %s process message
without IPC status handler.
```

Explanation   ASR1000 IOS shim layer has no ipc status handler set

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

Error Message

```
%IOSXE_INFRA-3-SHIM_RXMSG_NO_IPC_HDL: ASR1000 shim layer without IPC handler for
fd %d, seqnum %d.
```

Explanation ASR1000 IOS shim layer cannot find ipc handler

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

Error Message

```
%IOSXE_INFRA-3-VM_PAGE_TABLE_ERR: VM guarded page operation failed, address 0x%x,
%s
```

Explanation VM guarded page avl tree operation error

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

Error Message

```
%IOSXE_INFRA-4-INJECT_TUN_NONIP_WARN: pak with linktype %s gets into non-ip tunnel
```

Explanation IP/IPv6/MPLS packet should to go through GRE tunnel for non-IP payload

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

Error Message

`%IOSXE_INFRA-5-IOS_INTR_OVER_LIMIT: IOS thread disabled interrupt for %u msec`

Explanation ASR1000 IOS thread process disabled interrupt too long

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

Error Message

`%IOSXE_INFRA-5-PUNT_SVC_CANT_ENQUEUE: Punted pak can't be enqueued for service`

Explanation Punted pak enqueue failed

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

Error Message

`%IOSXE_INFRA-5-PUNT_SVC_INVALID_OPT_PKT: Invalid IPv4 options packet punted to RP`

Explanation Invalid IPv4 options packet dropped in RP

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

Error Message

```
%IOSXE_INFRA-6-AUXTHD_REQUEST: Too many outstanding requests for file system
access
```

Explanation Resource temporarily unavailable

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

Error Message

```
%IOSXE_INFRA-6-BIPC_CREATE: bipc connect succeeded for %s
```

Explanation BIPC connect succeeded

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

Error Message

```
%IOSXE_INFRA-6-BIPC_DISCONNECT: disconnect by application for %s, bring down IPC
```

Explanation BIPC disconnect requested by an application

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

Error Message

```
%IOSXE_INFRA-6-BIPC_READBUF_ERR: process receive buffer error from %s, rc %d,
bring down IPC
```

Explanation BIPC error during IPC read from buffer

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

Error Message

```
%IOSXE_INFRA-6-BIPC_READ_ERR: connection read error from %s, rc %d, bring down IPC
```

Explanation BIPC error during IPC read

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

Error Message

```
%IOSXE_INFRA-6-BIPC_WRITE_ERR: write bipc error for %s, rc %d, bring down IPC
```

Explanation BIPC error during IPC read

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

Error Message

`%IOSXE_INFRA-6-EOBC_ADDR_CACHE: EOBC ip-table cache: %s`

Explanation Unable to setup internal address for eobc communication

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

Error Message

`%IOSXE_INFRA-6-PROCPATH_CLIENT_HOG: IOS shim client '%s' took %ld msec (runtime: %ld msec) to process a '%s' message`

Explanation The specified ASR1000 IOS shim client took too long to process a received IPC or chasfs 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 gathered information.

Error Message

`%IOSXE_INFRA-6-THEAD_SELECT_ERR: Inbound message or packet select error, %s.`

Explanation Socket select operation error in threads

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

IOSD Messages

Error Message

%IOSD_IMCC_CAPI-2-CRASHDUMP: Fatal error, calling crashdump, error: [dec] [chars]

Explanation A fatal condition has occurred causing IOS to crashdump.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IOSD_IMCC_CAPI-3-MSGDISPATCH: Unable to dispatch received TDL message (name = [chars]) from Interface Manager

Explanation An unexpected condition has occurred while IOS is trying to dispatch to the TDL message handler functions for received TDL messages from Interface 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. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IOSD_IMCC_CAPI-3-MSGDISPATCHNULL: Received NULL TDL message from IOS

Explanation An unexpected condition in which IOSD has received a NULL TDL message from Interface 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. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_IMCC_CAPI-3-MSGIPCERR: Unable to process received IPC messages from
Interface Manager, error: [chars]
```

Explanation An unexpected condition has occurred while IOS trying to process a received IPC message from Interface 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. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_IMCC_CAPI-6-CMSTATUS: Interface Manager Process is [chars]
```

Explanation The current status of Interface Manager Process.

Recommended Action No action is required.

Error Message

```
%IOSD_INFRA-3-CONSOLE_DBUG_DROP: System dropped %d bytes of console debug
messages.
```

Explanation Debugging messages are being generated faster than they can be displayed on the console. The messages can not be guaranteed to be seen so this message replaces the lost messages.

Recommended Action Consider using conditional debugging or turning off console logging.

Error Message

```
%IOSD_INFRA-3-EOBC_SOCK: Socket event for %s
```

Explanation An internal socket level event has returned an error which is indicated. This may have been the result of a bind, peek, receive or send operation with respect to the EOBC interface listed.

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

Error Message

`%IOSD_INFRA-3-IFS_DFLT_FS_REG_FAIL: Unable to set %s as a default file system.`

Explanation IOSD's platform dependent code failed to register the default file 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IOSD_INFRA-3-IFS_EXTLINK_ADD_FAIL: Could not add filesystem %s to IFS links`

Explanation Attempt to add filesystem root to allow for links failed

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IOSD_INFRA-3-IFS_UDEV_REMOVE_FAIL: Could not remove udev device %s`

Explanation Attempt to remove udev device failed

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_INFRA-3-SHIM_INIT_MEM_FAIL: IOSD shim layer initialization failed: Memory
initialization failed.
```

Explanation IOSD : IOS shim layer initialization of memory failed

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_INFRA-3-SHIM_INIT_PROC_FAIL: IOSD shim layer initialization failed:
Dispatch process creation failed
```

Explanation IOSD : IOS shim layer initialization creating dispatch process failed

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_INFRA-3-SHIM_INIT_TDL_FAIL: IOSD shim layer initialization TDL Lib %s
failed.
```

Explanation IOSD : IOS shim layer initialization of TDL library

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_INFRA-3-SHIM_INIT_WQ_CHASFS_FAIL: IOSD shim layer initialization failed:
Can not create receiving chasfs watched queue
```

Explanation IOSD : IOS shim layer initialization of watched queue failed

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_INFRA-3-SHIM_INIT_WQ_FAIL: IOSD shim layer initialization failed: Can not
create receiving queues
```

Explanation IOSD : IOS shim layer initialization of watched queue failed

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_INFRA-3-SHIM_NO_IPC_DISPATCH_HDL: IOSD shim layer %s process message
without IPC dispatch handler.
```

Explanation IOSD : IOS shim layer has no ipc dispatch handler set

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IOSD_INFRA-3-SHIM_NO_IPC_STATUS_HDL: IOSD shim layer %s process message without IPC status handler.`

Explanation IOSD : IOS shim layer has no ipc status handler set

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IOSD_INFRA-3-SHIM_RXMSG_NO_IPC_HDL: IOSD shim layer without IPC handler for fd %d, seqnum %d.`

Explanation IOSD : IOS shim layer cannot find ipc handler

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IOSD_INFRA-3-VM_PAGE_TABLE_ERR: VM guarded page operation failed, address 0x%x, %s`

Explanation VM guarded page avl tree operation error

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_INFRA-5-IOS_INTR_OVER_LIMIT: IOS thread disabled interrupt for %u msec
```

Explanation IOSD : IOS thread process disabled interrupt too long

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_INFRA-6-AUXTHD_REQUEST: Too many outstanding requests for file system access
```

Explanation Resource temporarily unavailable

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_INFRA-6-BIPC_DISCONNECT: disconnect by application for %s, bring down IPC
```

Explanation BIPC disconnect requested by an application

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IOSD_INFRA-6-BIPC_READBUF_ERR: process receive buffer error from %s, rc %d, bring down IPC`

Explanation BIPC error during IPC read from buffer

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IOSD_INFRA-6-BIPC_READ_ERR: connection read error from %s, rc %d, bring down IPC`

Explanation BIPC error during IPC read

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IOSD_INFRA-6-BIPC_WRITE_ERR: write bipc error for %s, rc %d, bring down IPC`

Explanation BIPC error during IPC read

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_INFRA-6-EOBC_ADDR_CACHE: EOBC ip-table cache: %s
```

Explanation   Unable to setup internal address for eobc communication

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_INFRA-6-PROCPATH_CLIENT_HOG: IOS shim client '%s' took %ld msec (runtime:
%ld msec) to process a '%s' message
```

Explanation   The specified IOSD IOS shim client took too long to process a received IPC or chasfs 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_MEMPOOL_MIB-3-BUFFPOOL_REG_ERROR: Bufferpool register data exceeds
allocated memory; Retrieved only %d entries.
```

Explanation   Memory allocated is not enough

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IOSD_RP_DPIDB-3-CF: Datapath IDB CF operation failed - %s`

Explanation Failure in some datapath ID CF activity.

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

Error Message

`%IOSD_RP_DPIDB-3-IDBBADTYPE: Datapath IDB type %d is not valid`

Explanation An unexpected condition has occurred as the type of a datapath IDB is not valid.

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

Error Message

`%IOSD_RP_DPIDB-3-IDBEXIST: Datapath IDB already exists in this mapping entry: %s-%d`

Explanation An unexpected condition has occurred that an attempt is made to save datapath IDB in a mapping entry filled by another.

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

Error Message

`%IOSD_RP_DPIDB-3-IDBNONEXIST: Datapath IDB does not exist in this mapping entry: %s-%d`

Explanation Datapath IDB lookup points to empty mapping entry.

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

Error Message

`%IOSD_RP_DPIDB-3-IDXALLOCFAILED: Datapath IDB index allocation failed: %s`

Explanation An unexpected condition has occurred as all the available of datapath IDB indices are used.

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

Error Message

`%IOSD_RP_DPIDB-3-IDXBADRANGE: Datapath IDB index %d is not in a valid range`

Explanation An unexpected condition has occurred as the index of a datapath IDB is not valid.

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

Error Message

`%IOSD_RP_DPIDB-3-IDXDELETIONFAILED: Deletion of datapath IDB index from the database failed`

Explanation An unexpected condition has occurred that deletion of datapath IDB indices failed.

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

Error Message

`%IOSD_RP_DPIDB-3-IDXINSERTFAILED: Insertion of datapath IDB index %d into database failed`

Explanation An unexpected condition has occurred that insertion of datapath IDB indices failed.

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

Error Message

`%IOSD_RP_DPIDB-3-IDXLOOKUPFAILED: Lookup of datapath IDB index from the database failed (%s)`

Explanation An unexpected condition has occurred that lookup of datapath IDB indices failed.

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

Error Message

```
%IOSD_RP_DPIDB-3-LIST: List %s failed for %s
```

Explanation List enqueue or removal failed

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

Error Message

```
%IOSD_RP_DPIDB-3-NOSWSUBBLOCK: SWIDB %s does not have a IOSD subblock
```

Explanation An unexpected condition has occurred that no IOSD subblock was previously allocated for a SWIDB.

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

Error Message

```
%IOSD_RP_DPIDB-3-NULLTIMER: NULL timer
```

Explanation A timer is NULL

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

Error Message

`%IOSD_RP_DPIDB-3-RF: Datapath IDB RF operation failed - %s`

Explanation Failure in some datapath ID RF activity.

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

Error Message

`%IOSD_RP_DPIDB-3-RPC: Datapath IDB RPC operation failed - %s`

Explanation Failure in some datapath ID RPC activity.

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

Error Message

`%IOSD_RP_LIIN-3-AFI_ATTACH_FAIL: LIIN VRF AFI %s attach failed`

Explanation Can not create afi subblock for LIIN vrf

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_RP_LIIN-3-CONFIG_FAIL: LIIN IP Configuration Failed
```

Explanation LIIN IP Configuration Failed

Error Message

```
%IOSD_RP_LIIN-3-PROCESS_CREATE_FAIL: LIIN configuration process creation failed,
%s
```

Explanation Can not create IOS process for liin init

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_RP_LIIN-3-VRF_CREATE_FAIL: LIIN VRF creation failed, %s
```

Explanation Can not create LIIN vrf during system init

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_RP_LIIN-6-CREATE_SUCCESS_INFO: LIIN vrf %s created with ID %d, ipv4 table-id
0x%x
```

Explanation LIIN vrf and ipv4 table created for LIIN port

Error Message

```
%IOSD_RP_LIIN-6-SET_ACCESS_FAIL: LIIN Access Failed
```

Explanation LIIN Access failed

Error Message

```
%IOSD_RP_MGMTE-3-MSGCREATENULL: Cannot allocate %s TDL message
```

Explanation An unexpected condition in which IOS cannot allocate TDL message for Management
ethernet.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

```
%IOSD_RP_MGMTE-3-MSGTDLINITERROR: Management ethernet interface messaging module
initialization failed: Unable to initialize messaging: %s
```

Explanation The Management ethernet interface subsystem has failed to initialize the infrastructure
for messaging with the Pluggable Services Daemon. Configuration of management ethernet
modules cannot proceed.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

```
%IOSD_RP_MGMTE-3-PROCESS_CREATE_FAIL: Management ethernet statistics process
creation failed
```

Explanation   Can not create IOS process for RP management ethernet port statistics collection

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_RP_MGMTVRF-3-AFI_ATTACH_FAIL: Management VRF AFI %s attach failed
```

Explanation   Can not create afi subblock for mgmt vrf

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_RP_MGMTVRF-3-INTF_ATTACH_FAIL: Management VRF attach to mgmt port failed
```

Explanation   Can not associate mgmt port to mgmt vrf

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_RP_MGMTVRF-3-PROCESS_CREATE_FAIL: Management VRF process creation failed,
%s
```

Explanation Can not create IOS process for mgmt port init

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_RP_MGMTVRF-3-SET_TABLEID_FAIL: Installing %s Management interface tableid
0x%x failed
```

Explanation Fail to set mgmt port tableid into Linux kernel

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_RP_MGMTVRF-3-VRF_CREATE_FAIL: Management VRF creation failed
```

Explanation Can not create mgmt vrf during system init

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_RP_MGMTVRF-6-CREATE_SUCCESS_INFO: Management vrf %s created with ID %d, ipv4
table-id 0x%x, ipv6 table-id 0x%x
```

Explanation   mgmt vrf and ipv4, ipv6 tables created for mgmt port

Error Message

```
%IOSD_RP_VTYMGT-3-MSGBIPCBUFFER: Unable to acquire a BIPC buffer of length %d for
sending messages.
```

Explanation   A message was to be sent by IOS, but no BIPC buffer was available. The message to be sent has been discarded and the associated operation failed.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_RP_VTYMGT-3-MSGBUILDERROR: Error '%d' building TDL Vty Management message
'%s': %s
```

Explanation   An unexpected condition has occurred while IOS is building a TDL response message for Vty Management

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_RP_VTYMGT-3-MSGDISPATCH: Unable to dispatch received TDL messages for Vty
Management
```

Explanation   An unexpected condition has occurred while IOS is trying to dispatch to the TDL message handler functions for received TDL messages for Vty Management.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

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

Error Message

`%IOSD_RP_VTYMGT-3-MSGDISPATCHNULL: Received NULL TDL message`

Explanation An unexpected condition in which IOS has received a NULL TDL message for Vty
Management.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

`%IOSD_RP_VTYMGT-3-MSGENQUEUEERROR: Error queueing TDL Vty Management message '%s'`

Explanation An unexpected condition has occurred when IOS attempted to queue a TDL response
message for Vty Management

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

`%IOSD_RP_VTYMGT-3-MSGERROR: Error '%d' handling a received TDL message '%s' for
Vty Management: %s`

Explanation An unexpected condition has occurred while IOS is processing a received Vty
Management TDL 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/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

```
%IOSD_RP_VTYMGT-3-MSGEXTAPPUPDATE: Unable to update external application data for
line '%d'
```

Explanation An attempt to update the external application for a line failed unexpectedly. The line update failed and if the line number specified is valid, the line was released.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_RP_VTYMGT-3-MSGINVALIDFIELDINT: Invalid field '%s' in TDL message '%s'
received: value '%u' for Vty Management
```

Explanation A message with an invalid field value was received for Vty Management

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_RP_VTYMGT-3-MSGMARSHALERROR: Error '%d' marshaling TDL Vty Management
message '%s': %s
```

Explanation An unexpected condition has occurred while IOS is marshaling TDL response message for Vty Management

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_RP_VTYMGT-3-MSGMISSINGFIELD: Missing field '%s' in TDL Vty Management
message '%s' received
```

Explanation A message missing a required field was received for Vty Management

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_RP_VTYMGT-3-MSGVTYCOUNT: Invalid vty count %d detected on initialization
```

Explanation Upon initialization, the Vty Management subsystem checks that the number of available vtys for the platform is valid.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_RP_VTYMGT-3-MSGVTYSVCINIT: Unable to initialize the Vty Management service
listen port
```

Explanation The platform IPC services failed to register the Vty Management service's need for a listen port. The Vty Management service will be unable to process requests. IOS services will be unavailable to external access methods.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_SCHED-3-AVL_INSERT_FAIL: Could not insert pid %d into process tree
```

Explanation An avl_insert() failed to add a process structure to the IOSD scheduler tree. This should never occur, as the tree is always searched first for the presence of the 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_SCHED-3-CALLED_FROM_INT: API call incorrectly made from interrupt level
```

Explanation An external routine provided by the IOSD scheduler was incorrectly called from the context of an interrupt handler. This is not a supported use of the external routine; the calling code must be fixed.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_SCHED-3-NEGATIVE_DEPTH: Queue '%s' consumed more than it produced (%d)
```

Explanation Based upon internal state derived from calls to mcp_queue_produced() and mcp_queue_consumed(), more data was consumed from a balanced queue than was produced into it. This is logically impossible, so the presence of this error generally indicates incorrect use of the two above mentioned routines.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_SCHED-3-NULLQ: Invalid API parameter
```

Explanation An external routine provided by the IOSD scheduler was incorrectly called with an invalid (NULL) pointer.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_SHIM-3-NAMEYOURERROR: An empty file at first, place holder for SHIM errors
```

Explanation An empty file at first, place holder for SHIM errors

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IOSD_SYS_SHELL-3-CONNECTFAIL: System Shell connection failed, %s
```

Explanation System Shell Connection failed

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IOSD_SYS_SHELL-3-LICENSE_RELEASE: License Release failed(%d)`

Explanation System Shell License Release failed

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IOSD_SYS_SHELL-3-LICENSE_REQUEST: %s`

Explanation System Shell License Request failed

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IOSD_SYS_SHELL-3-SENDFAIL: System Shell message send failed, %s`

Explanation System Shell Message Send failed

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IOSD_SYS_SHELL-4-LOCERR: Location Service, %s`

Explanation Location Service Related Errors

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

will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IOSD_WD-2-HEARTBEAT_FAIL: Heartbeat is not emitted. Heartbeat count:%d

Explanation Failure in IOS to generate a heartbeat is an abnormal condition

Recommended Action This message may be related to an abnormal configuration and system load, or transient high processing demand. When reporting this message, copy the message text exactly as it appears, include the stack trace and report to your technical support representative

Error Message

%IOSD_WD-2-HOG_DETECT_FAIL: CPUHOG detection failed to start.

Explanation Failure in setting up CPUHOG detection mechanism is an abnormal condition

Recommended Action This message may be related to an abnormal configuration and system load, or transient high processing demand. When reporting this message, copy the message text exactly as it appears, include the stack trace and report to your technical support representative

IOS_LICENSE Messages

Error Message

%IOS_LICENSE-2-NO_LICENSE: No valid license avaiable to run any feature

Explanation The Ios licensing subsystem could not get a valid license to run any feature on the box, please purchase a license.

Recommended Action Purchase a valid license to run the features you requier on the box. You should contact the cisco portal or a TAC engineer to get a license. You can do a show license at the privileged command line prompt to get the list of availabe feature in the box

Error Message

%IOS_LICENSE-2-NO_MEM: No memory available for %s

Explanation The Ios licensing subsystem could not obtain the memory it needed.

Recommended Action If this error message recurs, attempt to reduce memory usage by reducing the number of router features, or interfaces, enabled. Alternatively, add more memory. To display total memory usage for a router enter show memory summary at the privileged command line prompt. To display buffer usage enter show buffers at the prompt.

Error Message

```
%IOS_LICENSE-3-FAILED: %s
```

Explanation The ios licensing subsystem failed to create a process/watched boolean etc to watch request from the remote show subsys license commands

Recommended Action please capture the error msg and forward it to the appropriate licensing component

Error Message

```
%IOS_LICENSE-3-IPC_FAILED: %s failed with an error = %s
```

Explanation The ipc calls in the Ios licensing subsystem failed for some reason, please capture the error msg and forward it to the appropriate licensing component

Recommended Action please capture the error msg and forward it to the appropriate licensing component

Error Message

```
%IOS_LICENSE-3-RTTYS_FAILED: %s failed
```

Explanation The rttys calls in the Ios licensing subsystem failed for some reason, please capture the error msg and forward it to the appropriate licensing component

Recommended Action please capture the error msg and forward it to the appropriate licensing component

Error Message

```
%IOS_LICENSE-3-UNKNOWN_MSG_TYPE: an unknown message type was received, dropping
it, msg_type = %d
```

Explanation Ios licensing subsystem received a msg type which it does not recognizes or support

Recommended Action please capture the error msg and forward it to the appropriate licensing component

Error Message

```
%IOS_LICENSE_IMAGE_APPLICATION-3-FAILED: %s
```

Error Message

```
%IOS_LICENSE_IMAGE_APPLICATION-3-FAILED: [chars]
```

Explanation The Cisco IOS licensing subsystem has failed to create a process or a watched Boolean to respond to requests from the remote **show subsys license** command.

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

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

Error Message

%IOS_LICENSE_IMAGE_APPLICATION-3-UNKNOWN_EVENT: [chars]

Explanation The Cisco IOS software image licensing subsystem received an indication of an
unknown 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/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Search for resolved software issues using the Bug Toolkit at
http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance,
open a case with the Technical Assistance Center via the Internet at
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information. Attach the following
information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and
show tech-support commands and your pertinent troubleshooting logs.

Error Message

%IOS_LICENSE_IMAGE_APPLICATION-3-UNKNOWN_VERSION: [chars]

Explanation The IOS image licensing subsystem received an event for an unknown version of a
feature.

Recommended Action Capture the error message and forward it to the appropriate licensing
component.

Error Message

%IOS_LICENSE_IMAGE_APPLICATION-6-LICENSE_CONFIG: EULA must be accepted for
license level = [chars]

Explanation This is an informational message to inform user that you need to reissue the command
from an interactive terminal

Recommended Action Informational message only. No action is required.

Error Message

```
%IOS_LICENSE_IMAGE_APPLICATION-6-LICENSE_LEVEL: Module name = [chars] Next reboot
level = [chars] and License = [chars]
```

Explanation The message indicates the change in the next reboot license level.

Recommended Action No action is required.

Error Message

```
%IOS_LICENSE_IMAGE_APPLICATION-6-LICENSE_LEVEL_CONFIG: Please issue 'license
boot' config command to make extension license ([chars]) available for use.
```

Explanation This message indicates that to make the extension license available to a support image level, the licensing image level property must be configured.

Recommended Action Configure the licensing image level property to make the extension license available to a support image level

Error Message

```
%IOS_LICENSE_IMAGE_APPLICATION-6-NO_LICENSE: No valid license available: [chars]
= [chars]; [chars] = [dec]; [chars] = [chars]:[chars]
```

Explanation No valid license is available on the router. A default feature is being used.

Recommended Action Purchase a license to activate the required features.

Error Message

```
%IOS_RESILIENCE-5-ARCHIVE_ERROR: Error creating archive on device [chars]
```

Explanation A condition that is required for configuring the Cisco IOS software resilience feature could not be met.

Recommended Action Check free space on storage device.

Error Message

```
%IOS_RESILIENCE-5-CONFIG_RESIL_ACTIVE: Successfully secured config archive
[[chars]]
```

Explanation The Cisco IOS software resilience feature has successfully obtained a copy of the running configuration.

Recommended Action No action is required.

Error Message

%IOS_RESILIENCE-5-CONFIG_RESIL_INACTIVE: Disabled secure config archival [removed [chars]]

Explanation The Cisco IOS configuration resilience parameter has been disabled. The configuration archive has been removed.

Recommended Action No action is required.

Error Message

%IOS_RESILIENCE-5-CONFIG_UPDATE: Config archive updated to [chars]

Explanation The Cisco IOS software resilience feature has successfully updated the archived configuration file.

Recommended Action No action is required.

Error Message

%IOS_RESILIENCE-5-IMAGE_NOTFOUND: Running image not found on removable disk

Explanation A condition that is required for configuring the Cisco IOS software resilience feature was not met.

Recommended Action Ensure that the running image resides in local storage.

Error Message

%IOS_RESILIENCE-5-IMAGE_RESIL_ACTIVE: Successfully secured running image

Explanation The Cisco IOS software resilience feature has obtained a copy of the running image.

Recommended Action No action is required.

Error Message

%IOS_RESILIENCE-5-IMAGE_RESIL_INACTIVE: Disabled secure image archival

Explanation The Cisco IOS software resilience feature has been disabled. The image can now be deleted.

Recommended Action No action is required.

Error Message

%IOS_RESILIENCE-5-IMAGE_UPDATE: Image archive updated to [chars]

Explanation The Cisco IOS software resilience feature has successfully updated the archived image file.

Recommended Action No action is required.

Error Message

```
%IOS_RESILIENCE-5-INVALID_IMAGE: [chars] is not a valid cisco image
```

Explanation A condition that is required for configuring the Cisco IOS software resilience feature was not met.

Recommended Action Ensure that the Cisco IOS software image that resides in storage is not corrupted.

Error Message

```
%IOS_RESILIENCE-5-NON_CONSOLE_ACCESS: Non console configuration request denied
for command '[chars]'
```

Explanation An attempt was made to configure a function that requires console access.

Recommended Action Enter this command while in a console session only.

Error Message

```
%IOS_RESILIENCE-5-NOSPACE: Not enough space on storage device to create [chars]
archive
```

Explanation The storage device (disk0 or disk1) does not have sufficient free space to create a new archive.

Recommended Action Remove unused files from the storage device to create sufficient space for the new archive.

Error Message

```
%IOS_RESILIENCE-5-NO_SUPPORTED_DEVICE: No ATA disk found for storing archives
```

Explanation A required storage device was not found on this router.

Recommended Action Insert an ATA-compliant disk in one of the storage slots of the router.

IP Messages

Recommended Action The following are IP messages.

Error Message

```
%IP-3-BADIPALIGN: Invalid alignment in packet for IP. %s=%#x
```

Explanation The packet data structure is misaligned. This condition may result in a small amount of overhead in processing IP traffic.

Recommended Action Enter a show hardware command and report the output, along with this error message, to your technical support representative.

Error Message

`%IP-3-BADSROUTE: Improper source route. Length %d Ptr %d`

Explanation A hardware or software error occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IP-3-CNTRFULL: IP counter block is full (setting protocol %d)`

Explanation An internal software error occured.

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

Error Message

`%IP-3-DESTHOST: src=%i, dst=%i, NULL desthost`

Explanation An internal software error occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IP-3-ICMPRATELIMIT: [int] unreachables rate-limited within [int] milliseconds on
[chars]. [int] log messages suppressed since last log message displayed on [chars]
```

Explanation   An excessive number of packets are triggering log messages on this interface.

Recommended Action   Change the log threshold with the **icmp rate-limit** command or find the source of the packets and block the packets from this router.

Error Message

```
%IP-3-ICMPRATELIMITDF: [int] DF unreachables rate-limited within [int]
milliseconds on [chars]. [int] DF log messages suppressed since last log message
displayed on [chars]
```

Explanation   An excessive number of packets are triggering log messages on this interface.

Recommended Action   Change the log threshold with the **icmp rate-limit** command or find the source of the packets and block the packets from this router.

Error Message

```
%IP-3-IPTOPOID: Topology ID [hex] is invalid, can't get the base topology ID.
```

Explanation   An internal software error occurred.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IP-3-LOOPOUTIF: Output interface for packet has been changed for %d times and
dropped - src=%i, dst=%i, hl=%u, tl=%u, prot=%u, in=%s, nexthop=%i, out=%s
```

Explanation   A software error occurred.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IP-3-LOOPPAK: Looping packet detected and dropped -/n src=[IP_address],
dst=[IP_address], hl=[int], tl=[int], prot=[int], sport=[int], dport=[int]/n
in=[chars], nexthop=[IP_address], out=[chars]/n options=[chars]
```

Explanation A software error has occurred.

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

Error Message

```
%IP-3-MAXIRDP: Attempt to send IRDP to proxies exceeding configurable limit:
[dec], interface: [chars], secondary = [dec], proxy = [dec]
```

Explanation The sum of configured secondary addresses and configured proxy addresses exceeds the number of total addresses that the IRDP can support in its implementation.

Recommended Action Reduce the number of either the secondary IP addresses or proxy addresses configured for the interface.

Error Message

```
%IP-3-NONALIAS: non-alias address [IP_address] in table [chars] found in IP alias
list
```

Explanation The IP alias list holds IP aliases only but non-alias entries are found.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IP-3-NOOUTINTF: Output interface not available. source address: [IP_address],
destination address: [IP_address], routing type: [int]
```

Explanation   The output interface for this packet is not set.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IP-3-SBINIT: Error initializing [chars] subblock data structure. [chars]
```

Explanation   Initialization of the specified subblock data structure could not be accomplished.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IP-3-STCKYARPOVR: Attempt to overwrite Sticky ARP entry: %i, hw: %e by hw: %e
```

Explanation   Multiple stations configured with same IP in Private VLAN. Possible case of IP address stealing.

Recommended Action   Change the IP address of one of the two systems.

Error Message

```
%IP-4-CLASS: Bad IP address and mask %i%m in class_resolve()
```

Explanation   An internal software error occurred.

Recommended Action   If the error 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IP-4-DUPADDR: Duplicate address %i on %s, sourced by %e
```

Explanation Another system is using your IP address.

Recommended Action Change the IP address of one of the two systems.

Error Message

```
%IP-4-IPPOOLS: Detected a local pool and a DHCP pool with the same name: %s
```

Explanation A local pool and a DHCP pool have been configured with the same name. This may cause conflict during address allocations.

Recommended Action Change the name of one of the two pools

Error Message

```
%IP-4-UNICASTRPF: IP unicast reverse-path check disabled on %s
```

Explanation The IP verify unicast reverse-path feature was disabled because CEF was disabled (either through configuration or due to an internal 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%IP-4-ZERO_ADDR: Zero MAC address for %i in ARP cache
```

Explanation An entry in the ARP cache have a NULL MAC address

Recommended Action If this message recurs, call your technical support representative for assistance.

Error Message

```
%IP-5-ACL: %s
```

Explanation Error occured in IP access checks.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

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

Error Message

```
%IP-5-FAILMIDCHAIN: FAILED midchain stack: ipaddr=%i gvi=%s phyif=%s
```

Explanation Error occured in adjacency midchain stacking.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IP-5-TURBOACL: [chars]
```

Explanation An error occurred while the TURBOACL was being initialized.

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

Error Message

```
%IP-5-WEBINST_COMP: Selected IP address %i
```

Explanation A hardware or software error occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IP-5-WEBINST_KILL: Terminating DNS process
```

Explanation A hardware or software error occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IP-5-WEBINST_RESP: Sending DNS response to %i (request was for %i)
```

Explanation A hardware or software error occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IP-5-WEBINST_START: Attempting web install from host %i
```

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.

Error Message

```
%IP-6-L2MCASTDROP: Layer 2 Multicast packet detected and dropped,
src=[IP_address], dst=[IP_address]
```

Explanation The Layer 2 Multicast packet with Layer3 Unicast Destination has been dropped.

Recommended Action No action is required.

Error Message

```
%IP-6-PHYBCASTDROP: Physical broadcast packet detected and dropped,
src=[IP_address], dst=[IP_address]
```

Explanation The physical broadcast packet has been dropped.

Recommended Action No action is required.

IPA Messages

Error Message

```
%IPA-3-INVMBXCMD: %s: invalid mailbox command: %02X
```

Explanation A subsytem attempted to register a mailbox command that is out of range.

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

Error Message

```
%IPA-3-NEVER: bay [%s] mailbox response timed out after (%u + %u) usecs, mbx=%08X
```

Explanation A mailbox command sent from driver to the channel port adapter never completed within the expected time limit. As a result of this error, the channel port adapter driver will reset the port adapter and reload microcode to it.

Recommended Action The reset and reload rectified the problem. If that did not occur, then try the microcode reload operation again. If the error still occurs, record the output from the following commands: show tech, dir slot0 :, dir slot1 :, show log Provide this information to your technical support representative.

Error Message

```
%IPA-3-PORTCONN: bay [%u] failed to establish %s connection (%04X)
```

Explanation An attempt to establish the console or debugger connection with the channel port adapter failed.

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

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

Error Message

```
%IPA-3-PORTIOKILL: Port IO %s process terminating.
```

Explanation   Unexpected termination of a port io 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%IPA-3-UKNMBXCMD: %s: unknown mailbox command: %02X %02X %02X %02X
```

Explanation   The channel port adapter sent a mailbox command that the driver did not expect. This may occur if there is a version mismatch between the system image and the microcode.

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

IPACCESS Messages

Error Message

`%IPACCESS-2-NOMEMORY: Alloc fail for acl-config buffer. Disabling distributed mode on lc`

Explanation Unable to malloc a buffer to send access-list configuration down to linecards.

Recommended Action Enter a show chunks command and report the output, along with this error message, to your technical support representative.

Error Message

`%IPACCESS-2-WRONGREQUEST: Invalid request to allocate chunk of size %d`

Explanation We only allow acl chunks of max size IPACCESS_LARGE_CHUNK_SZ

Error Message

`%IPACCESS-2-WRONGSIZE: Incorrect length acl ipc xdr of type=%s len=%d received`

Explanation Received an acl message of the wrong size for that type

Recommended Action Report this error message, to your tech support representative.

Error Message

`%IPACCESS-3-SANITY_ERROR: [chars]`

Explanation A sanity error occurred while the ACL was being configured on the RP or while the ACL configuration was being downloaded to the line card.

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

Error Message

%IPACCESS-4-INVALIDACL: Invalid ACL field: [chars] is [dec]

> **Explanation**   An internal software error has occurred.

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

IPAD Messages

Error Message

%IPAD-3-BLOCKEMPTY: Block does not exist.

> **Explanation**   Tried to access a block that does not exist.

> **Recommended Action**   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IPAD-3-CTXTMASKTYPE: Search context mask type or sub type not recognized: [dec], [dec]. Search context last found IP address [IP_address], search context target IP address [IP_address].

> **Explanation**   An internal IPAD error occurred. Search contex mask type not defined.

> **Recommended Action**   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPAD-3-LISTTYPE: Double-linked list (DLL) type not recognized: [dec].`

Explanation   An internal IPAD error occurred. DLL type not defined.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPAD-3-MEMORY: cannot allocate memory for a block in IPAD: [chars]`

Explanation   The operation might have failed due to lack of memory.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPAD-3-TRIM: Access on level [dec], to the left of index [dec].`

Explanation   IPAD is not trimmed properly.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

IPC Messages

The following are interprocess communication (IPC) messages.

Error Message

```
%IPC-3-APP_IPC_FAIL: [chars] failed. IPC Error: [chars] ([int])
```

Explanation The IPC application process failed to perform an operation with the IPC layer. The message text includes the error code sent from the IPC layer.

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

Error Message

```
%IPC-1-TNIPC_CALLBACK: TN3270 IPC callback error: [chars][chars]
```

Explanation The TN3270 server attempted to obtain information from the RP, but the TN3270 server detected an error while processing the response from the RP. This is an internal program logic error.

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

Error Message

```
%IPC-1-TNIPC_RPC: TN3270 IPC request error: [chars][chars]
```

Explanation The TN3270 server has failed to obtain information from the RP.

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

Error Message

```
%IPC-2-BADSHARE: Bad refcount in [chars], ptr=[hex], count=[dec]
```

Explanation A reference count is used to track the usage of IPC messages. A function increments the count when it begins to use a message and decrements it when it finishes. When the count becomes zero, the data structure is freed. This message indicates that when the count was accessed, it was found to be zero or negative. This message can also specify that an RPC request for an application could not be added to the RPC request table because pending requests have filled the RPC request table.

Recommended Action Issue the **show ipc status** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show ipc status** command output, copy the message exactly as it appears on the console

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

Error Message

```
%IPC-2-CANT_SEND: %s: Cannot send IPC message from 0x%x to 0x%x: info 0x%x
```

Explanation An error occurred when sending IPC 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the commands and your pertinent troubleshooting logs. (show tech-support ipc)

Error Message

```
%IPC-2-INITFAILED: [chars]
```

Explanation IPC Resource Management Initialization failed.

Recommended Action This is a critical failure for IPC functionality. Copy the message exactly as it appears on the console or in the system log. Enter the sh version command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPC-2-INVALIDZONE: Invalid IPC Zone 0x%x.
```

Explanation Some operation is attempted on a zone ID not known to IPC

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

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the commands and your pertinent troubleshooting logs. (show tech-support ipc)

Error Message

%IPC-2-INVALSIZE: The IP fast path received an IPC message with an invalid
size(size/type - [dec]/[dec])

Explanation   The IP fast path switching module has received an IPC message with an invalid size.

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

Error Message

%IPC-2-LOCK: Lock done a deleted element 0x%x

Explanation   An internal inconsistency was found in some IPC data structures.

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

Error Message

%IPC-2-NOBOOL: Boolean NULL in IPC message: [hex].

Explanation   A watched Boolean was found to be null when an acknowledgment arrived. This Boolean was allocated while the message was being sent.

Recommended Action   Issue the **show ipc status** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show ipc status** command output, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided

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

Error Message

%IPC-2-NODISPATCH: Message for %x.%x has no receive queue or dispatch routine

Explanation   The IPC user failed to provide any means of handling the received 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the commands and your pertinent troubleshooting logs. (show ipc ports)

Error Message

%IPC-2-NOMEM: No memory available for [chars]

Explanation   The IPC protocol subsystem could not obtain the memory it required.

Recommended Action   If this error message is ongoing, reduce memory usage by reducing the number of router features or interfaces that are enabled. Alternatively, add more memory. To display total memory usage for a router, enter the **show memory summary** command in privileged EXEC mode.

Error Message

%IPC-2-NO_ACK_HANDLER: No handler for ACK with data.

Explanation   A preview function appended data to an acknowledgment (ACK) at the sender, but there is no corresponding ACK handler at the receiver.

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

Error Message

```
%IPC-2-ONINT: Called from interrupt level: [chars]
```

Explanation This debug message reports that an IPC application has attempted an IPC action, the performance of which has been prohibited at the interrupt level.

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

Error Message

```
%IPC-2-PRECLOSE: IPC port pre-closure overflow : [hex] : [hex]
```

Explanation An application attempted to close an IPC port when messages were pending in the retransmit queue causing the IPC defer table to overflow.

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

Error Message

```
%IPC-2-TEST: IPC test: %s
```

Explanation The IPC test routines.

Recommended Action IPC test only - no action required.

Error Message

```
%IPC-2-UNLOCK: Unlock done on already unlocked element 0x%x
```

Explanation An internal inconsistency was found in some IPC data structures.

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

Error Message

```
%IPC-3-APP_IPC_FAIL: %s failed. IPC Error: %s (%u)
```

Explanation IPC Application Process failed to do some operation with the IPC Layer. The message includes the error code from ipc layer

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

Error Message

```
%IPC-3-DELETED: Attempt to delete an IPC message (0x%x) a second time
```

Explanation An internal inconsistency was found in some IPC data structures.

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

Error Message

`%IPC-3-GIANT: Request for giant IPC packet denied. Request size = %d`

Explanation Someone requested a message that was too large for the IPC 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the commands and your pertinent troubleshooting logs. (show tech-support ipc)

Error Message

`%IPC-3-ISSU_API_ERR: [chars] failed with error code [dec]`

Explanation An ISSU API could not perform an operation for the IPC layer. The message text includes the error code from ISSU library.

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

Error Message

`%IPC-3-ISSU_ERROR: [chars] failed with error code [dec] for seat [hex]`

Explanation An ISSU API could not perform an operation for the IPC layer. The message text includes the error code from ISSU library.

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

Error Message

```
%IPC-3-LOWBUFF: The main IPC message header cache below application reserve count
(%d).
```

Explanation The main IPC message header cache fell below application reserve count.

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

Error Message

```
%IPC-3-NOBUFF: The [chars] IPC message header cache is empty
```

Explanation The specified IPC message header cache is empty and an incoming IPC message may be dropped as a result.

Recommended Action If this message occurs regularly, check the number of IPC message headers available in the cache by entering the **show ipc status** privileged EXEC command. Verify that the "IPC message headers in cache" message is returned. Next, enter global configuration mode and reconfigure the number of IPC message headers in the cache to a number larger than its current value. Enter the ipc cache n global configuration command, where n is the number of entries in the cache.

Error Message

```
%IPC-4-CONSISTENCY: Message failed consistency check: [chars]
```

Explanation This debug message indicates that an action attempted by the IPC module has encountered an unexpected state in its data structures.

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

Error Message

```
%IPC-4-GET_PAK_MSG: Failed for message size=[dec]
```

Explanation The system is unable to allocate I/O memory buffers of the required size.

Recommended Action If this error message is ongoing, reduce memory usage by reducing the number of router features or interfaces that are enabled. Alternatively, add more memory. To display total memory usage for a router, enter the **show memory summary** command in privileged EXEC mode.

Error Message

```
%IPC-4-MESSAGE_ERR: Send IPC Message: dest_port of message ([hex]) and dest port
port id ([hex]) are not Equal !
```

Explanation This message provides debugging information. The IPC layer found an error in the message that came from an IPC Client (sender). The message was not sent out by IPC.

Recommended Action Enter the debug ipc message, **show ipc statistics**, and **show ipc queue** commands.

Error Message

```
%IPC-4-MSGMAXTIMEOUT: Invalid maximum timeout value [dec] seconds; Period - [dec];
Retries - [dec]
```

Explanation The maximum message timeout for an IPC message exceeds 2 minutes.

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

Error Message

```
%IPC-4-NOPORT: Port Not Found. [hex] -- [hex], Index:[hex], Seq: [dec], flags:
[hex], size: [dec]
```

Explanation IPC has received a message that is destined for a port that cannot be found by IPC.

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

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

Error Message

```
%IPC-5-INVALID: [chars] [chars]=[hex]
```

Explanation   While processing an incoming message, IPC encountered invalid data in its internal data structures.

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

Error Message

```
%IPC-5-INVALIDINPUT: [chars]
```

Explanation   an IPC API has been called with invalid argument.

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

Error Message

```
%IPC-5-LIMIT: [chars}
```

Explanation   Several IPC messages are pending to be processed. If the number increases, it may result in the IPC header cache or EOBC buffers being exhausted.

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

Error Message

`%IPC-5-MSG_NULL: [chars]`

Explanation This message indicates a null IPC 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/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

`%IPC-5-NOCALLBACK: [chars]:Open port: Flow control callback funtion is set to NULL Flow control callback function is needed for this port`

Explanation An IPC application cannot be initialized because its initialization function does not appear in the IPC initialization list.

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

Error Message

`%IPC-5-NODELFUNC: Failed to intialize IPC client`

Explanation An IPC application cannot be initialized because its initialization function does not appear in the IPC initialization list.

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

Error Message

```
%IPC-5-NULL: %s %s=0x%x, %s 0x%x
```

Explanation IPC module could not find an IPC entity that is expected to be existing always

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

Error Message

```
%IPC-5-NULLBPHANDLER: Passed Null backpressure handler
```

Explanation The IPC cannot register an application's NULL function in the IPC backpressure handler list.

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

Error Message

```
%IPC-5-NULLDELFUNC: Invalid registration
```

Explanation An IPC application has attempted to register NULL function in the IPC initialization list.

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

Error Message

```
%IPC-5-OUTPUT_FAIL: Num [dec] Func=[hex] Seat: ID=[hex] [chars] Sent [dec] Heard
[dec]
```

Explanation   The IPC module has failed to transmit an IPC message to the indicated seat. The last sequence number sent and last sequence number acknowledged are specified in the error message.

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

Error Message

```
%IPC-5-QFULL: Q=[hex] [chars] [dec]
```

Explanation   The IPC queue is full.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information. IPCGRP Messages

Recommended Action   The following are Route Processor (RP) Interprocess Communication (IPC) messages.

Error Message

```
%IPC-5-REGPORTFAIL: [chars] [chars]=[hex] [chars]=[hex]
```

Explanation   The IPC has failed to register the control 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/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%IPC-5-RPCFULL: port: [hex], index: [dec], type: [hex]
```

Explanation An RPC request for an application could not be added to the RPC request table because pending requests have filled the RPC request table.

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

Error Message

```
%IPC-5-SEND_APP_MSG_FAILED: Send message to peer for [chars] failed. Reason:
[chars]
```

Explanation A client that is using an IPC application port could not send a message.

Recommended Action If the reason specified in the message is "no such port", this condition may be caused by different versions of Cisco IOS software running on the active and standby systems. For any other reason, copy the message exactly as it appears on the console or in the system log. Enter the **show ipc status**, **show ipc ports**, and **debug ipc errors** commands. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%IPC-5-SLAVELOG: VIP-[chars]
```

Explanation The Cisco IOS software, running on a VIP card, generated this message. The error message has been passed up to the RP or RSP for display. This message appears only if the user has entered the **service slave-log** command. This error message is a Cisco IOS error message from a VIP.

Recommended Action Read the message text after "VIP-" for further details on the nature of the message coming from the VIP.

Error Message

```
%IPC-5-WATERMARK: [dec] messages pending in [chars] for the port
[chars]([hex].[hex]) seat [hex]
```

Explanation Several IPC messages are waiting to be processed. If the number increases, the IPC header cache or EOBC buffers could become exhausted.

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

Error Message

```
%IPC-6-MAXRPCTIMEOUT: Maximum RPC timeout value [dec] seconds set for port [hex]
```

Explanation The maximum RPC timeout for an IPC message exceeds the maximum expected value of 10 minutes.

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

Error Message

```
%IPC-6-STATEFUL: [chars]
```

Explanation A Stateful IPC Event occurred.

Recommended Action No action is required.

IPCGRP Messages

Error Message

```
%IPCGRP-3-CARDERR: [chars]
```

Explanation An IPC card has registered itself to the IPC master twice. The card malfunctioned and its IPC is not active.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-3-CMDOP: IPC command [int] (slot[int]/[int]): [chars]
```

Explanation IPC command processing operational errors.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-3-CREATE_FAIL: [chars] [chars]
```

Explanation Failed to create IPC port on RP.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-3-ERROR: [chars]: [chars]
```

Explanation   An IPC error was detected.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-3-EVENTOP: Event [int] from slot[int]/[int]: [chars]
```

Explanation   IPC event processing operational errors.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-3-EVTOP: IPC event [int] (slot[int]/[int]): [chars]
```

Explanation   IPC command processing operational errors.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-3-EXECCMDMSG: Incorrect msg size (size=[int])
```

Explanation   Wrong size of a REXEC-On IPC command.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-3-INVALID_PARAMS: Invalid interface([int]/[int]/[int])
```

Explanation   Invalid interface addressed by the corresponding IPC message.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-3-INVNUM: [chars] ([int])
```

Explanation   The IPC application tried to send a message that was larger than IPC could handle. The message was not transmitted.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPCGRP-3-MSGERR: [chars] ([int])`

Explanation The slave IPC cannot register with master.It cannot exchange messages with the master.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPCGRP-3-NBLKCMD: [chars]`

Explanation Nonblocking IPC command queue initialization failure.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPCGRP-3-NBLKQ: [chars]`

Explanation Nonblocking IPC queue initialization failure.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-3-NOHWIDB: Cannot find hwidb for interface([int]/[int])
```

Explanation Interface identifier does not exist for the interface addressed by the corresponding IPC message.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-3-NOMSTR: Unable to open the IPC master UDP port
```

Explanation Unable to open the UDP port used to communicate with the IPC master.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-3-NULLMSG: Null [chars] ipc message
```

Explanation An empty IPC message, which is not expected to be received.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-3-NULLREXECCMD: Received empty ipc rexec cmd message
```

Explanation REXEC-On IPC command failure.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-3-REXEC: [chars]
```

Explanation REXEC-On IPC command failure.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-3-SEATERR: [chars] ([int])
```

Explanation The ID associated with an IPC card is either missing, duplicated, or cannot be created.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-3-SLOTPAR: Slot ID parity error.
```

Explanation The slot ID from the backplane is corrupt.

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

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

Error Message

```
%IPCGRP-3-SYSCALL: System call for command [int] (slot[int]/[int]) : [chars]
(Cause: [chars])
```

Explanation   IPC kernel system call error.

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

Error Message

```
%IPCGRP-6-BADCRDST: Unknown line card OIR state, [dec].
```

Explanation   The line card was found in an invalid OIR state.

Recommended Action   Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-6-BADCRDTYP: The PRE thinks the line card has a type other than the actual
type, actual [dec], PRE [dec].
```

Explanation   The PRE indicates a card type other than the actual card type.

Recommended Action   Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

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

Error Message

%IPCGRP-6-BADIMGCKSUM: The downloaded image has a bad checksum, required [hex],
actual [hex]

Explanation The checksum is bad for a downloaded image.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

%IPCGRP-6-BARENBDISAB: Barium interface [chars]

Explanation The Barium interface has been enabled/disabled.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

%IPCGRP-6-DNLDOK: The image download was successful.

Explanation A line card image has been successfully downloaded.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Enter the **show tech-support** command to gather data that might help identify the nature of the
message. Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-6-DNLDOVRUN: The image download has overrun the buffer
```

Explanation During an image download, the image buffer has been overrun.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-6-DNLDTOOLARG: The PRE is attempting to download an image bigger than the
line cards buffer, available [dec], dnld size [dec].
```

Explanation The image the PRE is attempting to download is bigger than the available buffer.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-6-IGNOREDNLD: Ignoring new downloaded image.
```

Explanation Downloading but not using a new image.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-6-LCREBOOT: LC Reset due to '[chars]'.
```

Explanation The LC has been reset.

Recommended Action No action is required. IPCOIR Messages

Recommended Action The following are the IPC online insertion and removal messages.

Error Message

```
%IPCGRP-6-NBLKCMD_Q_FULL: Nonblocking IPC command queue full ([dec] commands)
```

Explanation Nonblocking IPC command queue filled up and was flushed to avoid buffer starvation.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-6-NBLKEVT_Q_FULL: Nonblocking IPC event queue full ([dec] events)
```

Explanation Nonblocking IPC event queue filled up and was flushed to avoid buffer starvation.

Recommended Action No action is required.

Error Message

```
%IPCGRP-6-NBLKRSP_Q_FULL: Nonblocking IPC response queue full ([dec] responses)
```

Explanation Nonblocking IPC response queue filled up and was flushed to avoid buffer starvation.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IPCGRP-6-NOAPIDAT: Unable to acquire port data for the API port.

Explanation Unable to determine the API IPC port ID for the line card.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

%IPCGRP-6-NOAPIPORT: No API port ID for, [chars]

Explanation Unable to determine the API IPC port ID for the line card.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

%IPCGRP-6-NOBPEHWIDB:can't find the HW IDB for the BPE interface.

Explanation The interface for the BPE does not exist.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

%IPCGRP-6-NOINBND: Unable to create '[chars]' port, error [dec].

Explanation Unable to create the inbound (to card) API 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. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

`%IPCGRP-6-NOIPCPAK: Unable to get an available, empty IPC packet buffer.`

Explanation Unable to acquire a free IPC packet buffer from the pool.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

`%IPCGRP-6-NOKEEP: Too long since a keepalive was received from the PRE.`

Explanation The timer has expired while waiting for a keepalive from the PRE.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

`%IPCGRP-6-NOMSGSND: Unable to send an IPC message, error [dec].`

Explanation An error occurred when attempting to send an IPC message to the PRE.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-6-NOOPENAPI: Unable to open the line card API IPC port, error [dec].
```

Explanation Unable to determine the API IPC port ID for the line card.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-6-NOPROC: Unable to create IPC message dispatch process.
```

Explanation Could not start the IPC message receive 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. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-6-NOQLOOP: Unable to queue a received link-loop backplane ethernet
keepalive.
```

Explanation Unable to queue a received link-loop frame to the background 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. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-6-NOSLOT: Unknown slot number.
```

Explanation Needed to report line card slot number to the PRE, but has not been able to determine it.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-6-NOTBHLPR: The PRE wants to download a card image, but we're not a
boothelper.
```

Explanation The PRE is attempting to download an image, but a download image is not running.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-6-RESTART: Restart OIR fsm due to '[chars]'.
```

Explanation The OIR state machine has to be restared.

Recommended Action OIR state machine has to be restarted.

Error Message

```
%IPCGRP-6-SLOTID: Slot ID is [dec]/[dec].
```

Explanation This is slot ID of the card.

Recommended Action No action is required.

Error Message

```
%IPCGRP-6-UCODEVER: Reported microcode version, [dec].
```

Explanation The line card microcode version.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-6-UNKLCCMD: Received unknown command from CRE ([dec])
```

Explanation An unknown line card command was received by the line card.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-6-UNKWOBJ: Unknown IPC object received, [dec]
```

Explanation An recognized/supported IPC object has been received.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCGRP-6-UNKWOPCODE: Unknown IPC message opcode, [dec]
```

Explanation An IPC message was received with an unknown opcode.

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

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

Error Message

%IPCGRP-6-UNKWSUBTYP: Unknown SET message subtype, [dec]

Explanation A SET IPC message was received with an unknown subtype.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

IPCOIR Messages

The following are IPC Online Insertion and Removal (OIR) messages.

Error Message

%IPCOIR-2-CARD_UP_DOWN: Card in slot [dec]/[dec] is [chars]. Notifying [chars]
driver.

Explanation Notification of a line card coming Up or Down.

Recommended Action No action is required.

Error Message

%IPCOIR-2-CREATEFAIL: Could not create [chars]

Explanation Could not create specified resource.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Enter the **show tech-support** command to gather data that might help identify the nature of the
message. Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

```
%IPCOIR-2-NULL_PTR: [chars]: pointer is null
```

Explanation Line card pointer is null.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCOIR-2-PLUGIN_PREANALYZE_FAIL: Unable to preanalyze driver plugin in slot
[dec]/[dec].
```

Explanation A valid line card driver preanalyze failed.

Recommended Action Enter the **show tech-suppor**t command to gather data that might help identify the nature of the 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. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCOIR-3-BADIPHOST: Bad IP address or host name [chars]
```

Explanation Software specified an out-of-range card slot index.

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

Error Message

%IPCOIR-3-BADLCAPI: Incorrect API message version [hex]

Explanation The linecard and IOS images are badly out of phase.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IPCOIR-3-BADMESSVER: Incorrect message version obj [hex] op [hex] version [hex]

Explanation The linecard and IOS images are badly out of phase.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IPCOIR-3-BOGUSCARD: Bogus cardtype [dec]

Error Message

%IPCOIR-3-BUNDLE_BROKEN: Image bundle file [chars] corrupted.

Explanation The indicated image bundle file is corrupted.

Recommended Action Reinstall the file and/or ensure the filename is provisioned correctly.

Error Message

%IPCOIR-3-BUNDLE_FILE_MISSING: Image bundle file [chars] does not contain image file [chars].

Explanation The indicated image file was not found in the bundle file.

Recommended Action Download a correct bundle file and/or ensure the filenames are provisioned correctly.

Error Message

```
%IPCOIR-3-BUNDLE_MISSING: Image bundle file [chars] not found.
```

Explanation The indicated image bundle file was not found.

Recommended Action Download the file and/or ensure the filename is provisioned correctly.

Error Message

```
%IPCOIR-3-CARDCRASH: Card crashed in slot [dec]/[dec].
```

Explanation IPC message reporting wrong version received from an operational card.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCOIR-3-CARD_BADIDPROM: Card in slot [dec]/[dec] has an invalid card type in
IDPROM
```

Explanation The linecard IDPROM is unprogrammed or has failed.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCOIR-3-CARD_GET_VERSION_RESPONSE: Unsolicited response from slot [int]/[int],
oir_state = [chars]
```

Explanation Unexpected message from a line card.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

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

Error Message

```
%IPCOIR-3-CARD_UNSUPPORTED: Unsupported card type ([hex]) in slot [dec]/[dec].
```

Explanation   The line card is not supported by this version of IOS.

Recommended Action   Remove the line card and contact Software Advisor to select appropriate
software for this card.

Error Message

```
%IPCOIR-3-CARD_WRONGTYPE: Mismatched card type ([chars]) in slot [dec]/[dec].
Expected type [chars]. Use 'no card [dec]/[dec]' command to override
preprovisioning and update card type.
```

Explanation   The line card inserted does not match the currently provisioned card type.

Recommended Action   Replace wrong board type with currently provisioned board type, or type 'no
card' to allow new card type to be discovered.

Error Message

```
%IPCOIR-3-CARD_WRONGTYPE_HH: Mismatched card type ([chars]) in slot [dec]/[dec].
Expected half-height card. Use 'no card [dec]/[dec]' command to override
preprovisioning and update card type.
```

Explanation   The line card inserted does not match the currently provisioned card type.

Recommended Action   Replace wrong board type with currently provisioned board type, or type 'no
card' to allow new card type to be discovered.

Error Message

```
%IPCOIR-3-CRE_INIT_FAIL: Unable to initialize PRE ports.
```

Explanation   The PRE plugin init sequence failed.

Recommended Action   Copy the message exactly as it appears on the console or in the system log.
Enter the **show tech-support** command to gather data that might help identify the nature of the
message. Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

```
%IPCOIR-3-DUALCARDTYPECONFLICT: card [chars] in slot [[dec]/[dec]] dual slot card
conflict shutting down card if present
```

Explanation The card type conflicts with an already configured dual slot card residing in a neighboring slot.

Recommended Action Remove conflicting card type from adjacent slot and take card out of shutdown.

Error Message

```
%IPCOIR-3-FLASHFAIL: Could not load [chars]...
```

Explanation The indicated image is inaccessible.

Recommended Action Check the filename.

Error Message

```
%IPCOIR-3-HHCARDTYPECONFLICT: card [chars] in slot [[dec]/[dec]] HH card conflict
shutting down card if present &amp; subslot 1
```

Explanation The HH card type conflicts with the TCC Util card OR the BP of the UBR10K Chassis.

Recommended Action Remove conflicting card type from slot/subslot and take card out of shutdown.

Error Message

```
%IPCOIR-3-IMAGEVERSION: Image version stamp missing
```

Explanation The loaded image did not contain a recognizable version stamp.

Recommended Action Replace the image with known-good bits, and try again.

Error Message

```
%IPCOIR-3-IPC_DOWN_BUG: [chars]: IPC unexpectedly down
```

Explanation An internal error has occurred. The system should retry this operation and normal system operation will continue.

Recommended Action No action is required.

Error Message

```
%IPCOIR-3-IPC_GET_MSG_BUF_FAIL: Unable to get an IPC msg buffer in [dec] tries:
slot [int]/[int]
```

Explanation The IOS IPC buffer pool was empty for a sustained period of time.

Recommended Action Install more processor SDRAM in the Performance Routing Engine.

Error Message

%IPCOIR-3-IVFS_BROKEN: IVFS image file [chars] corrupted.

Explanation The indicated IVFS image file is corrupted.

Recommended Action Reinstall the file and/or make sure the filename is provisioned correctly.

Error Message

%IPCOIR-3-IVFS_MISSING: IVFS image file [chars] not found.

Explanation The indicated IVFS image file was not found.

Recommended Action Make sure the IVFS contains this line card image filename.

Error Message

%IPCOIR-3-JACKETSLOTCONFLICT: card [chars] in slot [[dec]/[dec]] Jacket card slot
conflict shutting down card if present

Explanation The Jacket card cannot be plugged into an even slot.

Recommended Action Insert the jacket card into an odd slot. INTR_MGR Messages

Recommended Action The following are Interrupt Manager messages.

Error Message

%IPCOIR-3-LOADER_DAEMON_FAIL: Couldn't create card loader daemon, type [dec] slot
[dec]

Explanation The firmware for the line card could not be loaded.

Recommended Action Reboot the DSLAM.

Error Message

%IPCOIR-3-LOADER_DNLD_NOBUF: Buffer allocation failed

Explanation The buffer downloader could not allocate a message buffer.

Recommended Action Reboot the chassis.

Error Message

%IPCOIR-3-LOADER_DNLD_REJECT: Buffer download to slot [int]/[int] rejected

Explanation The linecard buffer download server rejected the download.

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

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

Error Message

```
%IPCOIR-3-LOADER_IPC_FAIL: IPC failed ([chars]) [chars] slot [int]/[int]
```

Explanation   The IOS IPC protocol reported an unexpected error.

Recommended Action   Ensure the indicated card is still plugged in.

Error Message

```
%IPCOIR-3-LOADER_SERVER_FAIL: Remote server refused to load slot [int]/[int]
```

Explanation   Unable to load a line card. Load will be attempted again.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCOIR-3-PLUGIN_INIT_FAIL: Unable to create driver plugin in slot [dec]/[dec].
```

Explanation   A valid line card driver plugin create failed.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPCOIR-3-PLUGIN_PREANALYZE_FAIL: Unable to preanalyze driver plugin in slot
%d/%d.
```

Explanation   A valid linecard driver preanalyze failed.

Recommended Action   Possibly incompatible card types

Error Message

%IPCOIR-3-RECEIVE_CALLBACK_BUG: Cardoir_receive_callback: slot ([dec]) unsupported cardtype [dec]

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

%IPCOIR-3-RECEIVE_CALLBACK_CARD_MISMATCH: Cardoir_receive_callback: slot ([dec]) provisioned cardtype is different than [dec]

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

%IPCOIR-3-RECEIVE_CALLBACK_UNSOLICITED: Cardoir_receive_callback: slot [dec] unsolicited case!

Explanation Unavailable.

Recommended Action Unavailable.

Error Message

%IPCOIR-3-SC_INIT_FAIL: Unable to initialize PRE ports.

Explanation The PRE plugin init sequence failed.

Recommended Action Determine and fix cause.

Error Message

%IPCOIR-3-STATE_MACHINE_BUG: card_oir_loading() called, should never happen, recovering.

Explanation Internal software error. Will recover.

Recommended Action No action is required.

Error Message

%IPCOIR-3-STATE_MACHINE_BUG2: card_oir_insert_card: already have [hex], removing.

Explanation Internal software error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying

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

Error Message

%IPCOIR-3-TFTPFAIL: TFTP of [chars] failed...

Explanation The indicated image is inaccessible.

Recommended Action Check file permissions, network connectivity.

Error Message

%IPCOIR-3-TIMEOUT: Timeout waiting for a response from slot [dec]/[dec].

Explanation PRE lost connection with a Line Card. Line Card might have crashed.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Enter the **show tech-support** command to gather data that might help identify the nature of the
message. Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

%IPCOIR-3-WAKEUP_REASON_BUG: [chars]: unexpected wakeup major [hex] minor [hex]

Explanation An internal error has occurred.

Recommended Action Reboot the chassis.

Error Message

%IPCOIR-3-WRONGCARDTYPE: Wrong card type in slot [dec]/[dec].

Explanation IPC message reporting wrong card type received from an operational card.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Enter the **show tech-support** command to gather data that might help identify the nature of the
message. Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

```
%IPCOIR-4-IPC_GET_MSG_BUF: Get IPC msg buf failed [dec] time(s): slot [int]/[int]
- retry in [dec] sec
```

Explanation   The IOS IPC buffer pool was temporarily empty.

Recommended Action   Consider installing more processor SDRAM in the Performance Routig Engine.

Error Message

```
%IPCOIR-4-REPEATMSG: IPC handle already exists for [dec]/[dec]
```

Explanation   IPC communication between PRE and a line card already setup.

Recommended Action   No action is required.

Error Message

```
%IPCOIR-5-BUNDLE_FILE_LOADING: Extracting [chars] from [chars].
```

Explanation   The image for the indicated linecard type has been located.

Recommended Action   Normal operation, wait a moment for it to complete.

Error Message

```
%IPCOIR-5-CARD_DETECTED: Card type [chars] ([hex]) in slot [dec]/[dec]
```

Explanation   Line card insertion.

Recommended Action   No action is required.

Error Message

```
%IPCOIR-5-CARD_DIAG_UP: Card in slot [dec]/[dec] is up with diagnostic image ...
```

Explanation   The indicated card is now running with a diagnostic image.

Recommended Action   This is a normal behavior when the **diagnostic load** command is used to load a diagnostic image into the indicated card.

Error Message

```
%IPCOIR-5-CARD_DOWNFORDIAG: Taking card in slot [int]/[int] down for diagnostics
...
```

Explanation   The indicated card is taken down by the **diagnostic load** command to perform diagnostic testing.

Recommended Action   This is normal operation, wait for the diagnostic image to come up.

Error Message

```
%IPCOIR-5-CARD_LOADING: Loading card in slot [int]/[int] sw version [dec].[dec]
code MD5 [hex][hex][hex][hex] fpga MD5 [hex][hex][hex][hex]
```

Explanation   Notification of a line lard download w/MD5 data.

Recommended Action   No action is required.

Error Message

```
%IPCOIR-5-IVFS_FILE_LOADING: Extracting [chars] from [chars].
```

Explanation   The image for the indicated linecard type has been located.

Recommended Action   Normal operation, wait a moment for it to complete.

Error Message

```
%IPCOIR-5-LOADER_ENTER_BOOT: Linecard entering boot image, download will restart,
slot [dec]
```

Explanation   The line card is entering the boot image. If the line card contains 32kb of SRAM, this process might take a long period of time to complete.

Recommended Action   Wait for the process to complete.

Error Message

```
%IPCOIR-5-NEW_IMAGE_MATCH: Identical image - card in slot [int]/[int] not
re-loaded
```

Explanation   Notification of no line card download because of identical image.

Recommended Action   No action is required.

IPC_DRVR Messages

Error Message

```
%IPC_DRVR-2-DMAERR: DMA Error detected - [chars]([dec])
```

Explanation   The IPC DRVR packet switch notification has detected a DMA transfer error.

Recommended Action   The IPC subsystem is used by the channel adapter loader and channel adapter network management. A single DMA error will not impact these channel adapter functions. However, if you are experiencing problems loading the channel adapter or retrieving information from the channel adapter, you will have to reload the channel adapter microcode. In any case, report this message to your Cisco technical support representative.

Error Message

```
%IPC_DRVR-4-NOMEM: Unable to obtain [chars]
```

Explanation   The IPC DRVR transport subsystem could not obtain the memory it needed.

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

IPC_RPM Messages

The following are interprocess communication (IPC) messages.

Error Message

```
%IPC_RPM-3-CARDERR: %s
```

Explanation   IPC card registered itself to the IPC master twice.

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

Error Message

```
%IPC_RPM-3-ECC: WARNING  : ECC Single Bit Error Correction
```

Explanation   A ECC Single Bit Error was detected and corrected.

Recommended Action   Use the command 'debug rpm ecc' to look at the total number of ECC errors since the system was booted. 'debug rpm ecc count' will set the number of ECC errors that will cause a Switch Over.

Error Message

```
%IPC_RPM-3-INVMSG: %s (%d)
```

Explanation   An invalid IPC message was received during cc command exection

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IPC_RPM-3-INVNUM: %s (%d)

Explanation The IPC application tried to send a message that was larger than IPC could handle. The message was not transmitted.

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

Error Message

%IPC_RPM-3-NOBUF: %s

Explanation The IPC ran out of memory buffers.

Recommended Action Reduce the number of applications currently running on the IPC. Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

%IPC_RPM-3-PORTREGFAIL: [chars]:[chars] Error:[chars]

Explanation The specified function was not able to register the port that was provided by the application.

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

Recommended Action The following are interprocess communication messages.

Error Message

%IPC_RPM-3-SEATERR: %s %s

Explanation The ID associated with an IPC card is either missing, duplicated, or cannot be created.

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

Error Message

```
%IPC_RPM-4-ECC: WARNING   : ECC Single Bit Error Correction
```

Explanation An ECC single-bit error has been detected and corrected.

Recommended Action Use the debug rpm ecc command to review the total number of ECC errors that have occurred since the system was booted. Use the debug rpm ecc count command to set the number of ECC errors that will cause a switchover to occur.

Error Message

```
%IPC_RSP_CBUS-3-CARDERR: %s
```

Explanation An IPC card has registered itself to the IPC master twice. The card malfunctioned and its IPC is not active.

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

IPC_RSP_CBUS Messages

Error Message

```
%IPC_RSP_CBUS-3-INVNUM: %s (%d)
```

Explanation The IPC application tried to send a message that was larger than IPC could handle. The message was not transmitted.

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

Error Message

```
%IPC_RSP_CBUS-3-MSGERR: [chars] ([dec])
```

Explanation The slave IPC cannot register and exchange messages with the master.

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

Error Message

%IPC_RSP_CBUS-3-NOBUF: [chars]

Explanation The IPC has run out of memory device (MEMD) buffers.

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

Error Message

%IPC_RSP_CBUS-3-NOHWQ: Hardware queue for card at slot %d not found

Explanation IPC messages cannot be transmitted due to a missing hardware queue. The messages were discarded, and subsequent messages will not be transmitted to that card.

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

Error Message

%IPC_RSP_CBUS-3-SEATERR: %s (%d)

Explanation The ID associated with an IPC card is either missing, duplicated, or cannot be created.

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

Error Message

%IPC_RSP_CBUS-4-ENQUEUEFAIL: Enqueue of IPC msg [hex] failed.

Explanation An IPC message failed to be enqueued into the hold queue. This error can occur either because the queue is full and no IPC messages can be added to it or because a queueing element cannot be allocated. If a queueing element cannot be allocated, the error message SYS-NOELEMENT will immediately precede this 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/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

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

IPC_URM Messages

Error Message

```
%IPC_URM-3-BFLASH_CHMOD_FAILED: [chars]
```

Explanation   Boot flash write protection is controlled from IGX console. The IGX user has attempted to change the mode, but Cisco IOS software is unable to find the file descriptor for the boot flash device, and the operation has failed.

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

Error Message

```
%IPC_URM-3-INVMSG: [chars] ([dec])
```

Explanation   An invalid IPC message type was received.

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

Error Message

```
%IPC_URM-3-INVNUM: [chars] ([dec])
```

Explanation   The IPC application tried to send a message that was larger than the IPC could process. The message was not transmitted.

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

Error Message

```
%IPC_URM-3-INVTIMER: Invalid URM expired timer type [dec]
```

Explanation   An internal software error has occurred.

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

Error Message

```
%IPC_URM-3-NOBUF: [chars]
```

Explanation The IPC has run out of memory buffers.

Recommended Action Reduce the number of applications currently running on the IPC. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%IPC_URM-6-BFLASH: [chars]
```

Explanation Boot flash write protection is controlled from the IGX console. This informational message is displayed on the router console when the IGX user changes the mode.

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

IPDCAPP Messages

Error Message

```
%IPDCAPP-6-IPDC_PACKET_OVERFLOW: The packet size [dec] overflows the pre-defined
size [dec]
```

Explanation The packet size is larger than the predefined size, causing the TCP connection to shut down. An attempt to reconnect will be initiated.

Recommended Action Check the network connection.

Error Message

```
%IPDCAPP-6-PROCESS_CREATION_FAILED: Cannot create IPDC application [chars]
```

Explanation An attempt to create the IPDC application process or TCP process has failed.

Recommended Action Check the amount of free memory to ensure that enough memory is available.

Error Message

```
%IPDCAPP-6-PROCESS_INIT_FAILED: Failed to initialize the IPDC application process
due to [chars]
```

Explanation The IPDC application process has failed to initialize.

Recommended Action Check the amount of free memory to ensure that enough memory is available.

Error Message

```
%IPDCAPP-6-SESSION_DISCONNECTED: The TCP connection between [chars] and NAS is
disconnected
```

Explanation The TCP connection between the NAS and the Softswitch is disconnected. The NAS will attempt to reconnect the TCP connection.

Recommended Action Check the Softswitch status.

Error Message

```
%IPDCAPP-6-SOCKET_OPEN_FAILED: Failed to open socket for IPDC application due to
errno [dec]
```

Explanation The application failed to open the socket for the IPDC TCP process.

Recommended Action Check that the IP address and TCP port are configured correctly.

IPE Messages

Error Message

```
%IPE-2-HOST_SECURITY_VIOLATION: Security violation occurred, caused by IP address
%i on port %s.
```

Explanation An unauthorized device attempted to connect on a secure port.The IP address of the unauthorized device and the secure portare specified in the error message.

Recommended Action Determine the device that attempted to connect on the secure port.Notify your network system administrator of this condition.

Error Message

```
%IPE-3-DUPLICATE_CONFIG_MASTER: Multiple Configuration Masters in domain %s. Use
show ipe errors command to check for errors.
```

Explanation There must be one Configuration Masters in every IPe domain.

Recommended Action Make sure that there is only one Forwarder configured as the Configuration Master in a domain. Use show ipe errors command to identify the forwarders and fix the error condition

Error Message

```
%IPE-3-PG_ACL_RESOURCE: Failed to allocate an internal ACL resource needed for
Policy Gateway
```

Explanation   An attempt to allocate an internal ACL failed.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPE-3-PG_VLAN_RESOURCE: Failed to allocate an internal vlan resource needed for
Policy Gateway
```

Explanation   An attempt to allocate an internal vlan failed.

Recommended Action   Please check the config and make sure that vlan resources are available

Error Message

```
%IPE-3-STATICHOST: Failed to add %s entry for host %i of tableid %d
```

Explanation   An internal software error occurred.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPE-4-DUPLICATE_HOST: Host %i is attached to multiple forwarders. Use show ipe
errors command to check for possible errors.
```

Explanation   In a host move scenario it is possible that a host is transiently attached to multiple forwarders during IPe convergence. However, it is an error if a host continues to be attached to multiple forwarders.

Recommended Action   Use show ipe errors command to identify the forwarders where the host is reported to be attached and fix the error condition.

Error Message

```
%IPE-4-DUPLICATE_LOCAL_HOST: Host %i on interface %s has duplicate ip address.
```

Explanation If existing host has been removed it is possible that this is a transient condition. An expedited ARP track is started on existing host to remove the entry if the host is no longer there. Once existing entry is removed host addition will be possible. However, it is an error if multiple hosts continue to use duplicate address.

Recommended Action Use show ip host mapping command to identify the interface where the host is reported to be attached and remove the duplicate ip address from one of the hosts.

IPFAST Messages

The following are IP fast switching messages.

Error Message

```
%IPFAST-2-BADIF: No support available for interface %s (programming error)
```

Explanation A programming error occurred.

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

Error Message

```
%IPFAST-2-FAILOPENIPCPORT: Could not open the IPC ports. %s
```

Explanation ipfast could not open the ipc port to communicate to the LC/RRP/SP.

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

Error Message

```
%IPFAST-2-FASTPORTCREATEERR: Attempt to create %s failed after %d retries (last
error:%s)
```

Explanation The Linecard attempted to create a port to the Route processor but has failed after a few retries. This might result in CEF getting disabled in this line card

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPFAST-2-FASTPORTOPEN: Requested to open %s, id %u when already open. Attempting
to re-open.
```

Explanation The Linecard is attempting to open a port to the Route processor when one is already open. This could be transient behavior but may result in multiple ports opened for the same purpose.

Recommended Action The router should be able to recover from this situation. If CEF problems develop for this line card, copy the error message exactly as it appears and report it to your Cisco technical support representative

Error Message

```
%IPFAST-2-FASTPORTOPENERR: Attempt to open %s failed after %d retries (last
error:%s)
```

Explanation The Linecard attempted to open a port to the Route processor but has failed after a few retries. This might result in CEF getting disabled in this line card

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPFAST-2-FASTPORTREGISTERERR: Attempt to register %s failed after %d retries
(last error:%s)
```

Explanation The Linecard attempted to register a port to the Route processor but has failed after a few retries. This might result in CEF getting disabled in this line card

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPFAST-2-INVALSIZE: The IP fast path received an IPC message with an invalid
size(size/type - %d/%d)
```

Explanation The IP fast path switching module has received an IPC message with an invalid size.

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

Error Message

```
%IPFAST-2-IPCACHEINIT: Error initializing IP fast cache structures
```

Explanation A programming error occurred.

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

Error Message

```
%IPFAST-2-MSGDROP: IPC queue limit is reached and message is dropped. queue limit
= [dec] cumulative drops = [dec]
```

Explanation IPC raw queue limit for IP fast path is reached.

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

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

Error Message

```
%IPFAST-2-PAKSTICK: Corrupted pak header for %s, flags %#x
```

Explanation A programming error has occured.

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

Error Message

```
%IPFAST-2-RADIXINIT: Error initializing IP fast cache structures
```

Explanation A programming error occurred.

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

Error Message

```
%IPFAST-3-INTLEV: Cache update request at interrupt level: %i(%s)-%i(%s)
```

Explanation A programming error occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

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

Error Message

`%IPFAST-3-INVALIDADDR: Invalid cache destination %i/%d`

Explanation The system attempted to add a cache entry for an invalid address.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

`%IPFAST-3-SANITY: Found existing %s specific entry %i%m..%m-%i (%s) when`
`attempting to create %i%d..%d-%i (%s)`

Explanation Problems related to the IP route cache triggered this debugging message.

Recommended Action The router should correct for this error. If the router cannot forward packets
properly or is experiencing other problems, copy the error message exactly as it appears and report
it to your Cisco technical support representative.

Error Message

`%IPFAST-4-FAILATTEMPTOPENIPCPORT: Attempt to open the IPC ports failed. %s`

Explanation ipfast failed an attempt to open the ipc port to communicate to the LC/RRP/SP.

Recommended Action No action is required.

Error Message

`%IPFAST-4-FASTPORTCREATEWARN: Attempt to create %s failed. Will be retried %d`
`times (last error:%s)`

Explanation The Linecard is attempting to create a port to the Route processor but has failed. This
could be a transient behavior and hence retries will be attempted

Recommended Action The router should be able to recover from this situation. If CEF gets disabled
for this line card, copy the error message exactly as it appears and report it to your Cisco technical
support representative

Error Message

```
%IPFAST-4-FASTPORTOPENWARN: Attempt to open %s failed. Will be retried %d times
(last error:%s)
```

Explanation The Linecard is attempting to open a port to the Route processor but has failed. This could be a transient behavior and hence retries will be attempted

Recommended Action The router should be able to recover from this situation. If CEF gets disabled for this line card, copy the error message exactly as it appears and report it to your Cisco technical support representative

Error Message

```
%IPFAST-4-FASTPORTREGISTERWARN: Attempt to register %s failed. Will be retried %d
times (last error:%s)
```

Explanation The Linecard is attempting to register a port to the Route processor but has failed. This could be a transient behavior and hence retries will be attempted

Recommended Action The router should be able to recover from this situation. If CEF gets disabled for this line card, copy the error message exactly as it appears and report it to your Cisco technical support representative

Error Message

```
%IPFAST-4-INVALFAIL: Error invalidating IP fast cache due to memory shortage
```

Explanation Running short of memory triggered this debugging message. This could result in wrong switching decisions.

Recommended Action The router memory should be upgraded and if the problem persists copy the error exactly as it appears and report it to your technical support representative.

Error Message

```
%IPFAST-4-RADIXDELETE: Error trying to delete prefix entry for %i/%d (expected
%#x, got %#x)
```

Explanation Problems related to the IP route cache triggered this debugging message.

Recommended Action The router should correct for this error. If the router cannot forward packets properly or is experiencing other problems, copy the error message exactly as it appears and report it to your Cisco technical support representative.

Error Message

`%IPFAST-4-RADIXINSERT: Error trying to insert prefix entry for %i/%d (expected %#x, got %#x)`

Explanation Problems related to the IP route cache triggered this debugging message.

Recommended Action The router should correct for this error. If the router cannot forward packets properly or is experiencing other problems, copy the error message exactly as it appears and report it to your Cisco technical support representative.

Error Message

`%IPFAST-5-SUCCEEDOPENIPCPORT: Attempt to open the IPC ports succeeded. %s`

Explanation ipfast succeeded an attempt to open the ipc port to communicate to the LC/RRP/SP.

Recommended Action No action is required.

Error Message

`%IPFAST-6-INVALIDATE: Cache invalidation occurring for %s`

Explanation The system is invalidating all cache entries for a given interface.

Recommended Action No action is required.

Error Message

`%IPFAST-6-INVALREQ: Cache invalidation request for %s`

Explanation The system is invalidating all cache requests for a given interface.

Recommended Action No action is required.

Error Message

`%IPFAST-6-PAKSHORT: Packet too short from %i, datagram size %d, tl %d`

Explanation An IP packet which is too short was received

Recommended Action No action is required.

IP FLOW Messages

Error Message

%IPFLOW-2-CACHEINIT: Error initializing IP flow cache

Explanation   Initialization of the Flow cache could not be accomplished because of a low memory condition.

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

Error Message

%IPFLOW-2-EXPORTINIT: Error initializing Flow Export queue

Explanation   Initialization of the Flow export queue could not be accomplished because of a low memory condition.

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

Error Message

%IPFLOW-2-PROCESSINIT: Error initializing Flow background process

Explanation   Initialization of the Flow background process could not be accomplished because of a low memory condition.

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

Error Message

%IPFLOW-2-QUEUEINIT: Error initializing Flow feature queue

Explanation   Initialization of the Flow feature queue could not be accomplished because of a low memory condition.

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

Error Message

%IPFLOW-2-TEMPLATETBL_INIT: Error initializing Flow Export Template Table

Explanation The flow export template table did not initialize because of low memory.

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

Error Message

%IPFLOW-3-DISABLEFLOWEXPORT: [chars]

Explanation Flow export has been disabled because the export destination address is the same as the IP address of one of the interfaces.

Recommended Action Check the IP addresses of all the interfaces to ensure that none of them matches the flow export destination IP address.

Error Message

%IPFLOW-3-SBINIT: Error initializing [chars] subblock data structure. [chars]

Explanation Initialization of the specified subblock data structure has failed.

Recommended Action Unavailable.

Error Message

%IPFLOW-4-V9_TEMPLATE_EXPORT: Error creating [chars]

Explanation Version 9 export template length is zero.

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

IPMCAST Messages

Error Message

%IPMCAST_LIB-3-TIMER_ERR: Unexpected error in the timer library: [chars]

Explanation An internal error has occurred in the timer library.

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

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

Error Message

```
%IPMCAST_LIB-4-RPF_DEPTH_ERR: Depth for rpf lookup greater than [dec] for [chars]
```

Explanation The number of recursions for resolution of a given route has exceeded the allowed maximum. This condition is usually due to a router misconfiguration.

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

Error Message

```
%IPMCAST_LIB-4-RPF_STATIC_ERR: No match for RIB static route[p]/[dec] in static
table for root[p]
```

Explanation An internal error has occurred.

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

Error Message

```
%IPMCAST_LIB-4-UNKNOWN_EVENT_ERR: Unexpected event received: [dec]
```

Explanation A handler has not been found for this event.

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

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

Error Message

```
%IPMCAST_LIB-6-EVENT_Q_SIZE: The event queue size has exceeded [dec]
```

Explanation   The event queue has exceeded a recommended size. Queue processing might become slower.

Recommended Action   No action is required.

Error Message

```
%IPMCAST_LIB-6-TIMER_BUSY: Timer drift is accumulating, [dec] msecs
```

Explanation   A large amount of processing load is present on the system, and the timers are accumulating delay.

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

Error Message

```
%IPMCAST_LIB-6-TIMER_BUSY_ERR: Timer drift is accumulating, [time-stamp]
```

Explanation   There is a large processing load, and the timers are accumulating the delay.

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

Error Message

`%IPMCAST_RPF-3-INTERNAL_ERROR: An internal error has occured while obtaining RPF`
`information ([chars])`

Explanation   RPF handling Internal error.

Recommended Action   If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPMCAST_RPF-3-RIB_REGISTER_FAIL: Failed to register with RIB, multicast RPF`
`lookups will notfunction`

Explanation   Multicast could not register with RIB to obtain RPF information later. This will cause a severe problem when there is multicast traffic flow, since it will not be possible to obtain RPF information.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPMCAST_RPF-3-START_FAIL: Error trying to start RPF watch for prefix [IP_address]`
`([chars]), RPF information will not be obtained`

Explanation   Internal error has occured while trying to obtain RPF information for a prefix. Subsequent changes in RPF information for the prefix will also not be obtained as a result. This will impact the multicast traffic flow for this prefix.

Recommended Action   If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPMCAST_RPF-3-STOP_FAIL: Error trying to stop RPF watch for a prefix
```

Explanation   Internal error has occured while trying to stop obtaining RPF change information.

Recommended Action   If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPMCAST_RPF-4-FOREIGN_VRF: RPF for [IP_address] (VRF [chars]) resolves in a
foreign VRF ([chars])
```

Explanation   RPF resolves in a foreign VRF without specifing any encapsulation or non-IP transport, multicast cannot handle this, thus a tree will not be built. This could be a temporary condition, but if the error persists, check your routing configuration.

Recommended Action   If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPMCAST_RPF-4-RIB_UNREGISTER_FAIL: Multicast failed to unregister with RIB
```

Explanation   Multicast could not unregister with RIB when multicast is disabled. There will not be any existing traffic flow since multicast is already disabled. However, if enabled again, and if a problem is seen with multicast traffic flow, it should be reported.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPMCAST_RPF-4-RPF_LOOKUP_LOOP: RPF route lookup loop for [IP_address]
```

Explanation   A routing loop occurred during the recursive resolution of an RPF address.

Recommended Action   Check routing tables used for RPF.

Error Message

```
%IPMCAST_RPF-4-RTMGR_TOPO_ERR: Unexpted error accessing topology specific
information
```

Explanation   An internal error has occured while accessing topology specific information. The RPF informationmight not be obtained as a result, thus resulting in problems with multicast flows.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

IPMOBILE Messages

Error Message

```
%IPMOBILE-2-ASSERTFAILED: IPMOBILE assertion failed: %s
```

Explanation   The software detected an inconsistency. This is considered a serious error. The router attempts to continue, but IP Mobility processing may be impaired.

Recommended Action   Copy the error message exactly as it appears, noting any IP Mobility problems that you are experiencing, and report it to your technical support representative.

Error Message

```
%IPMOBILE-3-NOSOCKET: Unable to open socket
```

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

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

Error Message

`%IPMOBILE-3-SA_PARSE_FAILED: Error in parsing the security association for [chars]`

Explanation The mobile IP home agent encountered an error while it was processing the security association in the RADIUS access-accept message.

Recommended Action Check the RADIUS profile configuration for the mobile node for which the processing of the security association failed.

Error Message

`%IPMOBILE-6-DUPMOBNET: Unable to [chars] dynamic mobile network [IP_address] [IP_address] for MR [IP_address]; already [chars] MR [chars]`

Recommended Action An attempt by a mobile router to dynamically add or delete a mobile network has failed because that mobile network was already statically configured for or dynamically registered by another mobile router. A mobile network may be configured or registered for only one mobile router.

Recommended Action To avoid duplication errors, check the static mobile network configuration on the Home Agent or the dynamic mobile network configuration on the mobile router or routers.

Error Message

`%IPMOBILE-6-DUPVIRTNET: Unable to [chars] dynamic mobile network [IP_address] [IP_address] for MR [chars]; already configured as a virtual network`

Explanation A mobile router's attempt to dynamically add or delete a mobile network failed because that mobile network was already configured as a virtual network in the home agent.

Recommended Action To avoid duplication errors, make sure that the virtual network configuration on the home agent and the dynamic mobile network configuration on the mobile router do not have any overlapping network prefixes.

Error Message

`%IPMOBILE-6-REDUPDATEFAIL: Too many redundancy update failures ([dec]) in the last minute.`

Explanation The standby Home Agent has attempted to update its binding table by contacting the active Home Agent several times per minute. Some or all of these attempts have failed, and the number of failures have exceeded the threshold number.

Recommended Action Ensure that there is connectivity between the active Home Agent and the standby Home Agent. Also make sure that the clocks are synchronized between the two Home Agents and that the security associations are properly set between the two. If the preemption delay is set, try setting it to a shorter time period.

Error Message

```
%IPMOBILE-6-SECURE: Security violation on %s from %s %i - errcode %s (%d), reason
%s (%d)
```

Explanation   A security violation occurred during registration attempt.

Recommended Action   This is for informational purpose only.

IPM_C54X Messages

Error Message

```
%IPM_C54X-1-DSP_TIMEOUT: dsp [dec] NOT RESPONDING.
```

Explanation   The DSP driver cannot queue messages up to the DMA engine for transmission.

Recommended Action   Reset the DSPs on this port module.

Error Message

```
%IPM_C54X-1-NO_RING_DESCRIPTORS: No more ring descriptors available on %d slot.
```

Explanation   The DSP driver cannot queue messages up to the dma engine for transmit.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Reset the DSP's on this port module.

Error Message

```
%IPM_C54X-1-TOOBIG: DSP %d, packet(size %d) too big.
```

Explanation   A packet greater than the 256 bytes received on this interface.

Recommended Action   If the error 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPM_C54X-3-DSP_ALARM_INDICATION: DSP %d Sending alarm indication`

Explanation The dsp is indicating and unexpected event has occurred and may not continue to process calls.

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

Error Message

`%IPM_C54X-3-EPIC_NOT_RESPONDING: Epic TDM Switch failure`

Explanation The EPIC TDM switch failed to acknowledge a command

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

Error Message

`%IPM_C54X-3-ERROR_INIT_BLDR: DSP [dec] Unable to download the Boot loader firmware, ret = [hex]`

Explanation Error initializing the DSP with the bootloader firmware.

Recommended Action Power down, reinsert the port module, and reboot.

Error Message

`%IPM_C54X-3-ERROR_INIT_OVERLAY: [chars] Unable to download the Application overlay firmware. Status returned [hex]`

Explanation An error occurred during initialization of the DSP with the application or overlay firmware.

Recommended Action Power down, reinsert the port module, and reboot the system.

Error Message

`%IPM_C54X-3-HOST_XMIT_BLOCKED: Host is unable to transmit packets to DSP %d`

Explanation IOS is unable to communicate with one of the DSPs

Recommended Action Reload the IOS image running on the host and Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

```
%IPM_C54X-3-IDB_CREATE: Unable to allocate IDB
```

Explanation Unable to allocate DSP Interface IDB.

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

Error Message

```
%IPM_C54X-3-INIT_CONFIG_FAILED: DSP %d Sending alarm indication
```

Explanation The dsp is indicating that it is not able to properly initialize the port(s) it services.

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

Error Message

```
%IPM_C54X-3-INSUFICIENT_MEMORY: DSP [dec] on SPMM [dec]: Not enough memory to load
firmware
```

Explanation The specified DSP firmware requires SPMMs with more memory.

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

Error Message

```
%IPM_C54X-3-INSUFICIENT_SPMMS: %d SPMM Modules to support this configuration
```

Explanation Certain configurations require more than 1 SPMM module

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

Error Message

```
%IPM_C54X-3-NODSP: Can't get dsp resources
```

Explanation There are not enough DSP's for all the VIC's in the router.

Recommended Action There are more VIC's in the router than the DSP's can support. You need to upgrade your DSP module to get more DSP's. You can run 'show diag' to figure out how many DSP's the router has.

Error Message

`%IPM_C54X-3-NO_BUFFERS: No buffers available for DSP buffer pool`

Explanation   Unable to allocate buffers to DSP receive buffer pool.

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

Error Message

`%IPM_C54X-4-UNSUPPORTED_PVDM: Unsupported or Bad PVDM in SPMM slot [hex]`

Explanation   The type of Packet Voice DSP Module that is present in the system is not supported.

Recommended Action   Replace the unsupported Packet Voice DSP Module or upgrade to a version of Cisco IOS software that supports the PVDM you have. Refer to the system documentation to find the tyse of PVDMs that are supported with different Cisco IOS software versions on this router.

Error Message

`%IPM_DSPRM-3-ERROR_DSP_BOOTLDR_DNLD: Boot loader download failed for dsp %d in dsp group %d`

Explanation   DSP boot loader firmware download is not successful.

Recommended Action   Remove/put back DSP module or replace it

Error Message

`%IPM_DSPRM-3-ERROR_DSP_FW_DNLD: BAD restart indication received from dsp %d in dsp group %d`

Explanation   DSP firmware download is not successful.

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

Error Message

```
%IPM_DSPRM-3-ERROR_DSP_INIT: BAD init config response received from dsp %d in dsp
group %d
```

Explanation Initial configuration failed in dsp firmware.

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

Error Message

```
%IPM_DSPRM-3-ERROR_DSP_OPERATION: ALARM indication received from dsp %d in dsp
group %d
```

Explanation DSP has failed and indicated an alarm.

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

Error Message

```
%IPM_DSPRM-3-ERROR_FIRMWARE_DOWNLOAD: Could not bring DSP %d in DSP group %d in
service
```

Explanation DSP did not come up after repeated attempts to downloadfirmware.

Recommended Action Check if the dsp is not bad and reload the trunk. Ifproblem persists call support

Error Message

```
%IPM_DSPRM-3-ERROR_NO_DSP_RESOURCES: Insufficient DSP resources %s
```

Explanation DSP resources are not availabe to open a voice channel or to run a voice codec.

Recommended Action Check dsp resource usage and see if number of active calls exceede the limits.

Error Message

```
%IPM_DSPRM-3-ERROR_PORT_NOT_FOUND: Port %d/%d not found in any DSP group
```

Explanation T1 port is not added to any dsp group.

Recommended Action Check if tdm-clock has been configured for this port.

Error Message

```
%IPM_DSPRM-3-INSUFFICIENT: Insufficient DSP resources for timeslot [dec] on port
[chars]
```

Explanation The configuration requires more DSP resources than are available.

Recommended Action Change the configuration to specify fewer used time slots. Install additional DSP resources to allow for more complex configurations.

Error Message

```
%IPM_DSPRM-3-MAX_DSP_RESOURCES: Supports up to 8 DSPs due to HW limitation. Last
[dec] DSPs are not useful.
```

Explanation A maximum of eight DSPs can be used on the Cisco 1751 because of a hardware limitation.

Recommended Action Limit the number of DSPs to eight.

Error Message

```
%IPM_DSPRM-3-SLIC_VIC_POWER: Vic card in slot [dec] is unusable as DSP [dec] in
group [dec] failed to come up
```

Explanation Since some DSPs failed to come up, the power is off for the SLIC on the VIC that is serviced by that DSP. All DSPs serving this VIC slot must be operational.

Recommended Action Check to see if the DSP has failed, and reload the trunk. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%IPM_DSPRM-5-CODEC_CMPLX_CLI: Codec Complexity for VIC card in slot [dec] is
changed.
```

Explanation The codec complexity for a VIC has been changed. As a result of this change in codec complexity for an analog VIC, the number of analog voice ports supported may be changed.

Recommended Action If some voice ports were lost by changing to a higher-complexity codec, these voice ports and their associated configurations can be regained by moving back to a lower-complexity image.

Error Message

```
%IPM_DSPRM-5-SETCODEC: Configured codec [dec] is not supported with this dsp
image.
```

Explanation Codec negotiation has failed.

Recommended Action Change the DSP image to a high-complexity image.

Error Message

```
%IPM_DSPRM-5-TRANSCODING_SESS_ALLOCATE: [dec] transcoding sessions are allocated.
```

Explanation This message displays the actual number of transcoding channels that have been opened. The actual number may be more than the number that is required, because active calls occupy more DSPs.

Recommended Action Check the DSP resources by entering the show voice dsp command. Reconfigure transcoding sessions when active transcoding sessions have been reduced.

Error Message

```
%IPM_DSPRM-5-TRANSCODING_SESS_REDUCED: Number of transcoding sessions were
reduced to [dec] after group change
```

Explanation A group change from one to two groups caused the number of transcoding sessions to be reduced. Some DSP resources are not available.

Recommended Action Change the TDM clock configuration to restore some digital signaling channels and reconfigure the transcoding sessions.

IPM_NV_EEPROM Messages

The following are integrated posrt module NVRAM driver messages.

Error Message

```
%IPM_NV_EEPROM-3-BADNV: Detected invalid NVRAM size: %d bytes
```

Explanation The detected size of NVRAM is not one of the supported sizes.The NVRAM may be bad.

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

Error Message

```
%IPM_NV_EEPROM-3-NVERASEFAIL: Failed to erase config due to internal error
```

Explanation Password protection feature failed to erase config due to internal error

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

IPNAT Messages

The following are the IP Network Address Translation (IPNAT) messages.

Error Message

`%IPNAT-3-BADMAPPINGTYPE: NAT mapping type [dec] for mapping statistics from platform is invalid`

Explanation The mapping type for passing mapping statistics from platform is not for static nor dynamic mapping type which is invalid. This condition can cause the statistic counters for NAT mapping to be inaccurate on the RP

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPNAT-3-CONFIG: Unable to [chars] the configuration of dynamic mappings`

Explanation An internal operation relating to the configuration of the dynamic mappings has failed. This may imply that the mapping has not been installed.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPNAT-3-CSBNULL: Parser structure for route-map [chars] configuration is nul`

Explanation The parser structure for route-map configuraion is nul which is invalid. This condition can cause the new translations to fail in the data path

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

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

Error Message

```
%IPNAT-3-IF_UP: Error in sending interface UP event for [chars] to the ager process
```

Explanation An internal operation relating to the interface UP event has failed which is unexpected.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

```
%IPNAT-3-LIMITSTATSNULL: NAT mexentry statistics structure from platform is nul
```

Explanation The structure for passing maxentry limit statistics from platform is nul which is invalid.
This condition can cause the statistic counters for NAT maxentry limit to be inaccurate on the RP

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

```
%IPNAT-3-MAPPING_NULL: Unexpected NULL pointer received as input.
```

Explanation An internal operation that notifies the platform about a mapping has provided an
unexpected input.

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

Error Message

`%IPNAT-3-MAPPINGSTATSNULL: NAT mapping statistics structure from platform is nul`

Explanation   The structure for passing mapping statistics from platform is nul which is invalid. This condition can cause the statistic counters for NAT mapping to be inaccurate on the RP

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPNAT-3-POOLSTATSNULL: NAT pool statistics structure from platform is nul`

Explanation   The structure for passing global/systems stats from platform is nul which is invalid. This condition can cause the statistic counters for NAT pool to be inaccurate on the RP

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPNAT-3-PORTLISTNULL: Portlist for address [IP_address] proto [dec] is nul`

Explanation   The portlist for the address which requests more port blocks is nul which is invalid. This condition can cause the new translations to fail in the data path

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPNAT-3-PORTNULL: Start port or end port for port block allocation request is nul`

Explanation Start port or end port for port block allocation request is nul, This condition can cause the new translations to fail in the data path

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPNAT-3-RTMAPNAMENULL: Route-map name for [chars] configuration is nul`

Explanation The route-map name is nul which is invalid. This condition can cause the new translations to fail in the data path

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPNAT-3-RTMAPNULL: route-map for configuration download is nul`

Explanation The route-map structure is nul which is invalid. This condition can cause the new translations to fail in the data path

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPNAT-3-SBINIT: Error initializing [chars] subblock data structure. [chars]`

Explanation Initialization of the specified subblock data structure has failed.

Recommended Action Unavailable.

Error Message

`%IPNAT-3-SYSSTATSNULL: NAT global/system statistics structure from platform is nul`

Explanation The structure for passing global/systems statistics from platform is nul which is invalid. This condition can cause the NAT global statistic counters in inaccurate on the RP

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPNAT-3-UNEXPECTED_MAPPING_FLAG: Unexpected mapping flag [hex] received`

Explanation An internal operation that notifies the platform about a mapping has provided an unexpected input.

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

Error Message

`%IPNAT-3-WLANSESSNULL: NAT WLAN session structure for session [chars] from platform is nul`

Explanation The structure for passing WLAN session from platform is nul which is invalid. This condition can cause the NAT WLAN session to fail in the data path

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

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

Error Message

```
%IPNAT-4-ADDR_ALLOC_FAILURE: Address allocation failed for %i, pool %s might be
exhausted
```

Explanation   An address could not be allocated from the IP NAT pool. This condition can cause a
translation failure and might result in packets being dropped. The counter for misses will be
incremented for these packets.

Recommended Action   Check to see if the NAT pool has been exhausted. To reuse any existing
addresses in the NAT pool for new packet flows, clear the current NAT entries using clear ip nat
translation *

Error Message

```
%IPNAT-6-ENTRIES: Static translation count reset, inside/outside
source/destination [int]/[int] [int]/[int]
```

Explanation   Upon the removal of the last remaining static translation from the configuration it has
been determined that there is a discrepancy with the internal accounting as regards the previous
provisioning of inside source/destination versus outside source entries. The internal accounting has
been reset to indicate that there are no translations of any type currently.

Recommended Action   Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

```
%IPNAT-6-ID: [chars] identifier has wrapped
```

Explanation   The identifier which is assigned to that which is resultant from the configuration in
question has cycled through the available number space and is now allocating from its initial value
again.

Recommended Action   No action is required.);

Error Message

```
%IPNAT-6-NATCREATE: [chars]
```

Explanation   A NAT entry has been created in the NAT database.

Recommended Action   No action is required.

Error Message

```
%IPNAT-6-NATDELETED: [chars]
```

Explanation   A NAT entry has been deleted from the NAT database because of either user-entered CLI or a timeout.

Recommended Action   No action is required.

Error Message

```
%IPNAT-6-PORT_ALLOC: Port allocation via [chars] for [int] [chars] [chars] ports,
min [int] max [int]
```

Explanation   A port allocation request for the specified range of ports has been attempted from the named party on the standby RP. This is an informational message which tracks the request source.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPNAT_HA-3-ATTRIBUTE: Bulk sync of [chars] via [chars], [chars] is invalid for
[chars]
```

Explanation   An attempt to bulk sync an address pool or a dynamic/static translation has detected that the entity which is to be sent to the standby RP when acting in a stateful redundant mode contains an invalid owner property and hence cannot be synchronized. The detection of this case will result in a failure of the bulk sync.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IPNAT_HA-3-BULK_SYNC: Failed to send [chars] information to peer

Explanation The bulk synchronization of the NAT configuration to the standby RP has failed to complete successfully; NAT has therefore taken the action which will result in a reload of the peer in order to once more attempt to successfully synchronize the configuration state which may have failed initially to a transient condition.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IPNAT_HA-3-CLIENT: Failed to register with [chars], [chars]

Explanation The NAT High Availability has failed to register with the specified component during initialization. This is an internal error which indicates that the NAT HA services will be unavailable.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IPNAT_HA-3-DECODE: Decode via [chars] of [chars] failed

Explanation A message of the transport and type described failed in its attempt to be decoded on the standby. The resultant action taken by the standby route processor is an attempt to resynchronize.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPNAT_HA-3-DYN_DEFERQ: [chars] failed to defer[chars]`

Explanation   The incremental synchronization of the NAT dynamic state to the standby RP has failed to add the information to the deferral queue for later processing during the time where the standby RP is progressing to it's hot standby redundant state. This implies that the runtime state between the active and standby RP would be inconsistent once the standby has been fully initialized.

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

Error Message

`%IPNAT_HA-3-DYN_SYNC: Failed to process [chars] dynamic state`

Explanation   The incremental synchronization of the NAT configuration to the standby RP has failed to complete successfully. This implies that the configuration state between the active and standby RP is inconsistent.

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

Error Message

`%IPNAT_HA-3-INTERFACE_TYPE: [chars] type/slot [hex] unit [int] num [int] channel [int] value [int]`

Explanation   An attempt to sync a dynamic translation or address change has detected that the interface which was encoded on the active RP has a different type the standby RP. The detection of this case will result in a failure of the bulk or LBL sync.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

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

Error Message

%IPNAT_HA-3-ISSU: [chars] [chars] failed; [chars]

Explanation An operation pertaining to the ISSU support for NAT failed to complete using either the
CF or IPC transport context with the reason specified

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

%IPNAT_HA-3-MISMATCH: [chars] [chars] mismatch with id [int]

Explanation The specified synchronization operation has failed to complete on the standby route
processor due to an inconsistency in the internal id which would have resulted in an inconsistent
configuration between active and standby. The resultant action taken by the standby route processor
is an attempt to resynchronize.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

%IPNAT_HA-3-NEGOTIATION: Failed to start ISSU [chars] session negotiation; [chars]

Explanation The ISSU negotiation with the peer failed to start for either the CF or IPC transport with
the reason specified.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

```
%IPNAT_HA-3-PROGRESSION: Unable to inform RF of bulk sync completion; [chars]
```

Explanation The active route processor has sent a notification to the standby to inform of the completion of the bulk synchronization of the NAT configuration. The standby has failed to respond to the active informing that it received the notification noting the reason for the failure. The resultant action taken by the standby route processor is an attempt to resynchronize.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPNAT_HA-3-PURGE: Failed to purge [chars] information
```

Explanation The synchronization of the NAT configuration state to the standby RP has failed to purge an entry which has been deemed to be stale; NAT has therefore taken the action which will result in a reload of the peer in order to once more attempt to successfully synchronize the configuration state which may have failed initially to a transient condition.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPNAT_HA-3-RECEIVE: Message via [chars] is [chars]
```

Explanation An attempt to receive and process a versioned negotiation or synchronization message has failed due to an internal error being detected by the information received from the IPC or CF components.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPNAT_HA-3-REGISTRATION: ISSU [chars] failed for [chars]; [chars]
```

Explanation An ISSU registration for the set of initial capabilities and sessions failed due to the reason specified. This will have the effect of the NAT ISSU support being unavailable between peers.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPNAT_HA-6-RELOAD_DISABLED:Standby reload has been disabled, NAT RP state is out
of sync and the standby should e reloaded manually
```

Explanation The standby Route Processor (RP) reload was suppressed because the active and standby RPs are not synchronized.

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

Error Message

```
%IPNAT_HA-3-TRANSFORM: [chars] of [chars] via [chars] failed [chars]
```

Explanation An attempt to either encode or decode a versioned synchronization message has failed due to an internal error encountered by the ISSU component.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPNAT_HA-3-TRANSMIT: Unable to send via [chars] [chars] [chars] [chars]; [chars]
```

Explanation An attempt to send a versioned negotiation or synchronization message has failed due to an internal error encountered by the IPC or CF components.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPNAT_HA-6-ADDR_CHANGE: [chars] unable to locate interface [chars]
```

Explanation An attempt to sync an address change to the standby RP has detected that the interface which was to be encoded on the active RP is no longer present. The interface may have been removed from the configuration.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPNAT_HA-6-INTERFACE: [chars] type/slot [hex] uint [int] num [int] channel [int]
```

Explanation An attempt to sync a dynamic translation or address change has detected that the interface which was encoded on the active RP is not present on the standby RP. The detection of this case may result in a failure of the bulk or LBL sync.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPNAT_HA-6-MAPPING_COMPARE: [chars] [chars] [chars] mapping id [int] comparing
[chars] [chars] [chars] mapping id [int]
```

Explanation   The specified synchronization operation on the standby route processor has detected an internal condition with respect to the properities of dynamic mappings. This is informational.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPNAT_HA-6-MAPPING_EXISTS: [chars] [chars] [chars] mapping id [int]
```

Explanation   The specified synchronization operation on the standby route processor has detected the presence of an existing matching mapping. This may be associated with any observed PRC failures on the standby.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPNAT_HA-6-READY: [chars] peer not ready, discarding [chars]
```

Explanation   The synchronization attempt for the message has determined that the transport has lost communication with its peer. This is a normal situation which indicates that the standby route-processor is currently out of service implying a simplex redundancy mode.

Error Message

```
%IPNAT_HA-6-RELOAD: [chars], reloading [chars]
```

Explanation   A synchronization attempt between the active and standby RP peers has failed with the reason indicated. The standby peer is reloaded in an attempt to resynchronize when operating in a stateful redundant mode.

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

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

Error Message

`%IPNAT_HA-6-TIMEOUT: Bulk sync is flow controlled by [chars]`

Explanation   The bulk synchronization of the NAT configuration to the standby RP has encountered a flow control condition which has effected a timeout awaiting the condition to clear. This will result in a reload of the standby RP to allow the bulk synchronization to restart.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

IPP Messages

Error Message

`%IPP-3-PKT_EXCEEDS_MTU: [chars]: Outbound Packet size [dec] exceeds max MTU size for CMCC`

Explanation   An outbound CMPC packet is larger than the MTU size for the CMCC.

Recommended Action   Investigate why the host is sending packets that are larger than the configured MTU size on the CMCC.

IPPHONE Messages

Error Message

`%IPPHONE-6-REGISTER: ephone-[dec]:[chars] IP  :[IP_address] Socket:[dec] DeviceType:[chars] has registered.`

Explanation   The configured IP phone has been registered.

Recommended Action   No action is required.

Error Message

```
%IPPHONE-6-REGISTER_NEW: ephone-[dec]:[chars] IP  :[IP_address] Socket:[dec]
DeviceType:[chars] has registered.
```

Explanation   An IP phone has been registered. The phone is not yet in current running configuration.

Recommended Action   No action is required.

Error Message

```
%IPPHONE-6-REG_ALARM: [chars]
```

Explanation   The skinny client is informing the server of its software version and the reason for the last disconnect.

Recommended Action   No action is required.

Error Message

```
%IPPHONE-6-UNREGISTER_ABNORMAL: ephone-[dec]:[chars] IP  :[IP_address]
Socket:[dec] DeviceType:[chars] has unregistered abnormally.
```

Explanation   An IP phone has been unregistered without sending an unregister message.

Recommended Action   No action is required.

Error Message

```
%IPPHONE-6-UNREGISTER_NORMAL: ephone-[dec]:[chars] IP :[IP_address] Socket:[dec]
DeviceType:[chars] has unregistered normally.
```

Explanation   An IP phone has successfully been unregistered.

Recommended Action   No action is required.

IPRT Messages

Recommended Action   The following are IP routing messages.

Error Message

```
%IPRT-2-COMPRESS: Bad route_compress() call, sdb= %x
```

Explanation   An internal software error occurred.

Recommended Action   If the error 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

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

Error Message

```
%IPRT-3-BADCOMLIST: Community list check with bad list %d
```

Explanation A user specified an invalid BGP community list number.

Recommended Action Check the system configuration to make sure that the community list specified
falls within the valid range.

Error Message

```
%IPRT-3-BADRFREG: Unable to register IP Routing as a client of RF.
```

Explanation This is a severe error as far as IP routing NSF is concerned

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

Error Message

```
%IPRT-3-IPTABLEINIT: IP routing table creation failure - %s
```

Explanation An internal software error occurred preventing the creation of new IP routing table.

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

Error Message

```
%IPRT-3-NOMEMORY: No memory available for %s
```

Explanation The requested operation failed because of a low memory condition.

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

Error Message

```
%IPRT-3-PATHIDX: Bad path pointer of %x for %i, %d max
```

Explanation A software error occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

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

Error Message

```
%IPRT-3-RIB_LOOP R Resolution loop formed by routes in RIB
```
Explanation RIB route producers have installed routes in the RIB that form a loop during resolution.

Recommended Action Resolve the RIB route loop: 1) Determine which routes are involved in the loop
be entering the **show ip route loops** command. 2) Correct the protocols owning the routes involved
in the loop in order to modify or remove one of the routes so the loop is broken. If this message
recurs, copy the message exactly as it appears on the console or in the system log. Research and
attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With
some messages, these tools and utilities will supply clarifying information. Also perform a search
of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require
assistance, open a case with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

```
%IPRT-3-ROUTELIMITEXCEEDED: IP routing table limit exceeded - %s, %i%m
```

Explanation The number of routes in the named IP routing table has reached the configured limit. No
further routes will be added to the table

Recommended Action Reduce the number of routes in the table, or reconfigure the limit

Error Message

```
%IPRT-3-ROUTELIMITWARNING: IP routing table limit warning - %s
```

Explanation The number of routes in the named IP routing table has reached the configured warning
limit.

Recommended Action Reduce the number of routes in the table, or reconfigure the limit

Error Message

```
%IPRT-3-STATICROUTESACROSSVRF: Un-installing static route
[IP_address][IP_netmask] from [chars] routing table with outgoing interface
[chars]
```

Explanation The system has restricted access to the static routes that point across VRF interfaces.

Recommended Action Remove the static routes that are pointing across VRF interfaces.

Error Message

`%IPRT-4-BADTRACKOBJECTTYPE: can't track this type of object`

Explanation Route maps only support STATE type track objects.This object is not a STATE object

Recommended Action Reconfigure the track object to make it a STATE object.

Error Message

`%IPRT-4-IDBROUTECOUNTNEGATIVE: Interface IP route counter negative - [chars]`

Explanation The system attempted to decrement the IP route counter to a negative value.

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

Error Message

`%IPRT-4-IPROUTING_INT_ERR: Illegal call flow in interrupt path.Caller needs to change its code path.`

Explanation An internal software error has occurred.

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

Error Message

`%IPRT-4-REDIST_MAX_PFX: Redistribution prefix limit has been reached '[chars]' - [dec] prefixes`

Explanation The maximum number of redistributed prefixes has been reached.

Recommended Action Check to see if the redistribution of a large number of prefixes is appropriate and has not been configured by mistake.

Error Message

```
%IPRT-4-REDIST_THR_PFX: Redistribution prefix threshold has been reached
'[chars]' - [dec] prefixes
```

Explanation The redistributed prefixes have reached the threshold level.

Recommended Action Check to see if the redistribution of a large number of prefixes is appropriate and has not been configured by mistake.

Error Message

```
%IPRT-4-ROUTECOUNTNEGATIVE: IP route counter negative - [chars], [IP_address]
Attempt: [dec]
```

Explanation An attempt was made to decrement the IP route counter into a negative value.

Recommended Action Use the **clear ip route *** command to reset the route counter. If this message persists, indicating a continuing condition, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%IPRT-4-TRACKOBJECTNONE: Illegal tracking number 0 on static route %i%m [%d/0] via
%i, table %d, client %d
```

Explanation Tracking number 0 is not accepted by the APIs that handles the tracked static route and will be treated as illegal

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

IPS Messages

Error Message

%IPS-2-DISABLED: [chars] - IPS disabled

> **Explanation** IP storage has been disabled. The message text should provide more information on the specific nature of the problem, which could include one or more of the following: IPS configuration has been removed from all the interfaces on the router.

> **Explanation** IPS could not load a signature file.

> **Explanation** IPS could not allocate memory for a critical resource.

> **Recommended Action** Perform actions that correspond to the reason for the IPS failure condition.

Error Message

%IPS-3-BUILTIN_SIGS_FAILED: Failed to load builtin signatures

> **Explanation** The built-in signatures have failed to load.

> **Recommended Action** The builtin signatures should build on all platforms that support IPS. This error indicates that something is wrong with the image.

Error Message

%IPS-3-ENGINE_BUILD_FAILED: [chars] - [dec] ms - engine build failed - [chars]

> **Explanation** One of the engines could not be built after an SDF file was loaded. One such message for each failed engine is sent. The most likely reason for this failure is low system memory.

> **Recommended Action** Increase the amount of memory on the router to attempt to alleviate the problem, or attempt to load the SDF file immediately after a system reboot when more system resources are available.

Error Message

%IPS-3-HTTP_PROTOCOL_ERROR: [chars] [[IP_address]:[dec] - [IP_address]:[dec]]

> **Explanation** A SMTP protocol error has occurred.

> **Recommended Action** Refer the Cisco Network Security Database for more details and recommended actions specific to each signature.

Error Message

`%IPS-3-IDS_TW_INIT_FAILED: IPS Timer Wheel initialization failed`

Explanation   The Timer Wheel initialization has failed in the IPS subsystem.

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

Error Message

`%IPS-3-INVALID_TYPEDEFS: : IPS Timer Wheel initialization failed`

Explanation   TYPEDEFS processing error.

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

Error Message

`%IPS-3-INVALID_TYPEDEFS:  : IPS Timer Wheel initialization failed`

Explanation   TYPEDEFS processing error.

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

Error Message

`%IPS-3-IPS_CONCURRENT_ACCESS: [ [chars]`**Explanation** Multiple processes are attempting to access the same data structures.

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

Error Message

`%IPS-3-IPS_FILE_OPEN_ERROR: [chars] - [chars]`**Explanation** Error occurred opening IPS file.

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

Error Message

`%IPS-3-LICENSE_EVENT_UNKNOWN: IOS IPS has received an unknown event from the licensing facility`

Explanation The Cisco IOS IPS has received an unknown event from the licensing facility.

Recommended Action Contact the Cisco IOS IPS team using the information available at http://www.cisco.com/go/iosips or contact your Cisco technical support representative.

Error Message

`%IPS-3-LICENSE_EXPIRED: IOS IPS update subscription license expired on [chars] and the extension expired on [chars]`

Explanation The Cisco IOS IPS update subscription license has expired and a new license must be obtained. Signatures will not be unloaded but updates after the expiration date will not be loaded.

Recommended Action Find instructions on how to obtain a signature update subscription license at http://www.cisco.com/go/iosips.

Error Message

```
%IPS-3-LICENSE_NOT_INSTALLED: IOS IPS update subscription license is not
installed. Some signatures may not be loaded.
```

Explanation The Cisco IOS IPS update subscription license is not installed. Some signatures will not be loaded until an ios-ips-update license is installed.

Recommended Action Find instructions on how to obtain a signature update subscription license at http://www.cisco.com/go/iosips.

Error Message

```
%IPS-3-LICENSE_UNSUPPORTED: IOS IPS does not currently support licensed signature
files
```

Explanation The IOS IPS does not currently support subscription licensing for use with IPS signature files. It is possible to bypass the licensing check by using a signed signature file from Cisco. The bypass-license attribute needs to include iosips or the specific platform string.

Recommended Action Visit http://www.cisco.com/go/iosips and obtain a signature package with a correct bypass-license attribute.

Error Message

```
%IPS-3-SIGNATURE_COMPILE_FAILURE: [[chars] [dec]
```
Explanation This error occurs when compilation fails for a signature. The signature is disabled.

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

Error Message

```
%IPS-3-SIG_UPDATE_REQUIRED: IOS IPS requires a signature update package to be
loaded
```

Explanation The original signature package is missing or was saved by a previous version of Cisco IOS IPS. The Cisco IOS IPS requires a new update even if an ios-ips-update license has not yet been installed.

Recommended Action Find instructions on how to obtain a signature update subscription license at http://www.cisco.com/go/iosips.

Error Message

```
%IPS-3-SMTP_PROTOCOL_ERROR: [chars] [[IP_address]:[dec] - [IP_address]:[dec]]
```

Explanation   A SMTP protocol error has occurred.

Recommended Action   See Cisco Network Security Database for more details and recommended actions specific to each signature.

Error Message

```
%IPS-3-UNKNOWN_NAME: [[chars] [chars]
```
Explanation   Unknown parameter or XML element name.

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

Error Message

```
%IPS-4-LICENSE_BYPASSED: IOS IPS subscription licensing has been bypassed
```

Explanation   The Cisco IOS software currently supports subscription licensing to load IPS signature files. Either this platform does not support subscription licensing, or this signature file contained an emergency update.

Recommended Action   Search for additional information at http://www.cisco.com/go/iosips.

Error Message

```
%IPS-4-LICENSE_EXPIRING: IOS IPS update subscription license is expiring on
[chars]
```

Explanation   The Cisco IOS IPS update subscription license is expiring and a new license must be obtained. Signatures will not be unloaded, but updates after the expiration date will not be loaded.

Recommended Action   Find instructions on how to obtain a signature update subscription license at http://www.cisco.com/go/iosips.

Error Message

```
%IPS-4-LICENSE_EXTENSION_EXPIRING: IOS IPS update subscription license expired on
[chars] and the extension is expiring on [chars]
```

Explanation The Cisco IOS IPS update subscription license extension is expiring and a new license must be obtained. Signatures will not be unloaded but updates after the expiration date will not be loaded.

Recommended Action Find instructions on how to obtain a signature update subscription license at http://www.cisco.com/go/iosips.

Error Message

```
%IPS-4-LOST_CONNECT: PO  : Connection to HostID  :[int] OrgID  :[int]
```

Explanation A connection has been dropped and there is no previous connection. IPS cannot communicate with the director.

Recommended Action Check the connectivity to the director and check the post office configuration on both the router and the director.

Error Message

```
%IPS-4-SDF_LOAD_FAILED: failed to [chars] SDF from [chars]
```

Explanation An SDF could not be loaded. Possible reasons for this failure are as follows: The SDF is on an unreachable network server.

Explanation The SDF does not have the correct read permissions.

Explanation The decryption routines for the SDF have failed.

Recommended Action Ensure that the server on which SDF is available is reachable by the router and that the SDF has the correct read permissions.

Error Message

```
%IPS-4-SDF_PARSE_FAILED: [chars] at Line [dec] Col [dec] Byte [dec] Len [dec]
```

Explanation An SDF file was not parsed correctly. This condition indicates that the SDF may be corrupted or could not be properly loaded on the router.

Recommended Action Ensure that the proper SDF is being loaded on the router and that the router is able to access and read it correctly.

Error Message

```
%IPS-4-SIGNATURE: Sig:[dec] Subsig:[dec] Sev:[dec] [chars] [[IP_address]:[dec] -
[IP_address]:[dec]]
```

Explanation An IPS signature has been triggered.

Recommended Action Refer to the signature code in the message text, then refer to the Cisco Security Center at http://www.cisco.com/security for more details and for recommended actions.

Error Message

```
%IPS-4-SIG_SUMMARY: Sig:[dec] Subsig:[dec] Global Summary: [dec] alarms in this
interval
```

Explanation A flood of IPS signatures of the same code have been detected and summarized.

Recommended Action Refer to the signature code in the message text, then refer to the Cisco Security Center at http://www.cisco.com/security for more details and for recommended actions.

Error Message

```
%IPS-4-SIG_UPDATE_EXPIRED: IOS IPS signature update contains signatures dated
after the subscription license has expired
```

Explanation The Cisco IOS IPS update subscription license has expired and a new license must be obtained. Signatures will not be unloaded but updates after the expiration date will not be loaded.

Recommended Action Find instructions on how to obtain a signature update subscription license at http://www.cisco.com/go/iosips.

Error Message

```
%IPS-4-SIG_UPDATE_PARTIALLY_LOADED: IOS IPS update subscription license has
expired and signatures were partially loaded
```

Explanation The Cisco IOS IPS update subscription license has expired and the signature update contains signatures after the expiration date. Signatures released prior to the signature update have been loaded, but signatures after the signature update have not been loaded.

Recommended Action Find instructions on how to obtain a signature update subscription license at http://www.cisco.com/go/iosips.

Error Message

```
%IPS-4-SYSERROR: Unexpected error ([chars]) at line [dec] func [chars]() file
[chars]
```

Explanation An unexpected internal system error has occurred.

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

Error Message

%IPS-4-TVR_COMPILE_FAILURE: [chars]

Explanation Triggers when compilation fails for target-value ratings.

Recommended Action Most likely cause of a compile failure is too many target-value rating entries. Decreasing the number of entries should solve the problem.

Error Message

%IPS-4-UNSUPPORTED_SIG: [chars] [dec]:[dec] [chars]=[chars] - This signature cannot be supported

Explanation An unsupported parameter was encountered while an SDF file was being parsed. The unsupported parameter is a required parameter for the signature. The entire signature has been deleted.

Recommended Action Ensure that the SDF file that is being loaded on the router does not contain any parameters that are not supported by the Cisco 160;IOS software IPS. IPSECV6 Messages

Recommended Action The following are encryption feature messages.

Error Message

%IPS-5-PACKET_DROP: [chars] - fail closed - packets dropped

Explanation Packets have been dropped by an IPS module that has failed and has been closed as mandated by the system configuration.

Recommended Action No action is required.

Error Message

%IPS-5-PACKET_UNSCANNED: [chars] - fail open - packets passed unscanned

Explanation Packets have been passed that were unscanned by an IPS module that has failed and has been closed as mandated by the system configuration.

Recommended Action No action is required.

Error Message

%IPS-6-BUILTIN_SIGS: [chars] to load builtin signatures

Explanation The router is loading the built-in signatures.

Recommended Action No action is required.

Error Message

%IPS-6-ENGINE_BUILDING: [chars] - [dec] signatures - [dec] of [dec] engines

Explanation The SME has begun building.

Recommended Action No action is required.

Error Message

%IPS-6-ENGINE_BUILD_DONE: Finished building all engines

Explanation This is an informational message that occurs when all engines are built, with or without failures, after successfully loading an SDF file.

Recommended Action No action is necessary.

Error Message

%IPS-6-ENGINE_BUILD_SKIPPED: [chars] - there are no new signature definitions for this engine

Explanation There are no signature definitions or no changes to the existing signature definitions of an IPS SME.

Recommended Action No action is required.

Error Message

%IPS-6-ENGINE_READY: [chars] - [dec] ms - packets for this engine will be scanned

Explanation An IPS SME has been built and is ready to scan packets.

Recommended Action No action is required.

Error Message

%IPS-6-LICENSE_INSTALLED: IOS IPS update subscription license has been installed

Explanation The Cisco IOS IPS update subscription license has been installed.

Recommended Action No action is required.

Error Message

%IPS-6-LICENSE_REMOVED: IOS IPS update subscription license has been removed

Explanation The Cisco IOS IPS update subscription license has been removed and signatures have been unloaded.

Recommended Action Find instructions on how to obtain a signature update subscription license at http://www.cisco.com/go/iosips.

Error Message

```
%IPS-6-LICENSE_REVOKED: IOS IPS update subscription license has been revoked
```

Explanation The Cisco IOS IPS update subscription license has been revoked and signatures have been unloaded.

Recommended Action Find instructions on how to obtain a signature update subscription license at http://www.cisco.com/go/iosips.

Error Message

```
%IPS-6-SDF_LOAD_SUCCESS: SDF loaded successfully from [chars]
```

Explanation An SDF file has been loaded successfully from a specified location.

Recommended Action No action is required.

Error Message

```
%IPS-6-SIG_CLIDELTA_IS_DISABLED: IOS IPS Signature clidelta functionality is
currently disabled
```

Explanation IOS IPS Signature clidelta functionality is currently disabled

Recommended Action Enable the CLIDELTA functionality. It is recommended that this functionality is enabled only on a customer router in a Service Provider environment. If you are on such a customer router, you may enable CLIDELTA functionality and try rerunning the show command.

Error Message

```
%IPS-6-SIG_CLIDELTA_TURNOFF_WARNING: WARNING IPS CLI Delta functionality is
turned OFFTunings will be stored in iosips-sig-delta.xmzTunings will not be stored
in iosips-sig-clidelta.xmz
```

Explanation CLI Delta functionality was turned off just now

Recommended Action No action is required.

Error Message

```
%IPS-6-SIG_CLIDELTA_TURNON_WARNING: WARNING IPS CLI Delta functionality is turned
ONTunings will be stored in iosips-sig-clidelta.xmzTunings will not be stored in
iosips-sig-delta.xmz
```

Explanation CLI Delta functionality was turned on just now

Recommended Action No action is required.

Error Message

```
%IPS-7-ENGINE_UNKNOWN: [chars] - unknown engine encountered while parsing SDF
```

Explanation An unknown and unsupported SME was encountered while the SDF file was being parsed.

Recommended Action Ensure that the SDF file being loaded on the router does not contain any engines that are not supported by the Cisco IOS software IPS.

Error Message

```
%IPS-7-UNSUPPORTED_PARAM: [chars] [dec]:[dec] [chars]=[chars] - This parameter is
not supported
```

Explanation An unsupported parameter was encountered while the SDF file was being parsed. IPS will scan for the signature without using this parameter.

Recommended Action Ensure that the SDF file that is being loaded on the router does not contain any parameters that are not supported by the Cisco IOS software IPS.

Error Message

```
%IPSECV6-4-PKT_PROTOCOL_MISMATCH: IP protocol in packet mismatched with tunnel
mode, packet from [chars] to [chars] dropped by [chars]
```

Explanation Tried to send an IPv4 packet into an IPSec-IPv6 tunnel, or an IPv6 packet into an IPSec-IPv4 tunnel. The tunnel cannot handle this type of packet, and so the packet is dropped.

Recommended Action Modify the tunnel configuration, either by removing the incorrect IP address type from the tunnel interface, or by changing the tunnel mode to match the IP address type.

Error Message

```
%IPSECV6-4-RECVD_PKT_NOT_IPSECV6: Rec'd packet not an IPSEC packet. (ip)
dest_addr= %P, src_addr= %P, prot= %d
```

Explanation Rec'd packet matched crypto map ACL, but is not IPSEC-encapsulated. IPSEC Peer is sending unencapsulated packets. There may simply be a policy setup error on the peer. Some might consider this a hostile event.

Recommended Action Contact the peer's administrator to compare policy settings.

Error Message

```
%IPSECV6-4-RECVD_PKT_V6_INV_PROT: decapsulate: packet missing %s, destadr=%P,
actual prot=%d
```

Explanation Rec'd IPSEC packet missing an expected AH or ESP header The peer is sending packets that don't match the negotiated security policy. Some might consider this a hostile event.

Recommended Action Contact the peer's administrator.

Error Message

```
%IPSECV6-4-RECVD_PKT_V6_INV_SPI: decaps: rec'd IPSEC packet has invalid spi for
destaddr=%P, prot=%d, spi=0x%x(%d), srcaddr=%P
```

Explanation Rec'd IPSEC packet specifies SPI that doesn't exist in SADB. This may be a temporary condition due to slight differences in aging of SAs between the IPSEC peers, or it may be because the local SAs have been cleared. It may also be because of bogus packets sent by the IPSEC peer. Some might consider this a hostile event.

Recommended Action If the local SAs have been cleared, the peer may not know this. In this case, if a new connection is established from the local router, the two peers may reestablish successfully. Otherwise if the problem occurs for more than a brief period, either attempt to establish a new connection or contact the peer's administrator.

Error Message

```
%IPSECV6-4-RECVD_PKT_V6_MSG_LEN_ERR: decapsulate: packet has bad %s length
destadr=%P, prot=%d, len=%d
```

Explanation Rec'd IPSEC packet is malformed: possibly encapsulation error. The peer is sending malformed packets. It may be due to a decryption error. Some might consider this a hostile event.

Recommended Action Contact the peer's administrator.

Error Message

```
%IPV6-3--1: Cannot start the IPv6 process; router will not process IPv6 packets.
```

Explanation The IPv6 process could not be started. This machine will not be able to process any IPv6 packets.

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

IPV6 Messages

Error Message

```
%IPV6-3-CONFLICT: RouterUnrecognized format ' %P' on [chars] has conflicting ND
settings
```

Explanation Another router on the link sent router advertisements with conflicting parameters to this router.

Recommended Action Verify that all IPv6 routers on the link have the same parameters in the router advertisement for hop-limit, managed-config-flag, other-config-flag, reachable-time and ns-interval, and that preferred and valid lifetimes for the same prefix that are advertised by several routers are the same. Use the **show ipv6 interface** command to list the parameters per interface.

Error Message

```
%IPV6-3-INTERNAL: Internal error, [chars]
```

Explanation An internal software error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPV6-3-MIN_MTU: The link MTU of [chars] is below the minimum IPv6 link MTU. IPv6
may not work correctly on this interface.
```

Explanation As specified in the standard, IPv6 requires that every link has an MTU of at least 1280 bytes or greater. Since the MTU of the specified link is below 1280 bytes, IPv6 must be disabled on this interface.

Recommended Action No action is required.

Error Message

```
%IPV6-3-NO_PROCESS: Cannot start the IPv6 process; router will not process IPv6
packets.
```

Explanation The IPv6 process could not be started. This machine will not be able to process any IPv6 packets.

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

Error Message

```
%IPV6-3-NO_UNIQUE_IDENTIFIER: Cannot determine an unique IPv6 identifier for the
system.IPv6 will not be started.
```

Explanation An unique IPv6 identifier could not be determined for the system. Therefore, the IPv6 process will not be started. This machine will not be able to process any IPv6 packets.

Recommended Action Verify that there is at least one interface in this machine that supports IEEE-style addresses.

Error Message

```
%IPV6-3-NULLIDB: Uninitialized interface pointer - [chars]
```

Explanation   An internal software error has occurred.

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

Error Message

```
%IPV6-3-NULLPAK: Uninitialized buffer pointer - [chars]
```

Explanation   An internal software error has occurred.

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

Error Message

```
%IPV6-3-RIB: [chars]
```

Explanation   An internal software error has occurred.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPV6-3-ROUTELIMITEXCEEDED: IPv6 routing table limit exceeded - [chars]`

Explanation The number of routes in the named IPv6 routing table has reached the configured limit. No further routes will be added to the table.

Recommended Action Reduce the number of routes in the table, or reconfigure the limit.

Error Message

`%IPV6-3-ROUTELIMITWARNING: IPv6 routing table limit warning - [chars]`

Explanation The number of routes in the named IPv6 routing table has reached the configured warning limit.

Recommended Action Reduce the number of routes in the table, or reconfigure the limit.

Error Message

`%IPV6-3-UNFRAGMENTABLE: Cannot fragment packet: unfragmentable part length [dec], MTU of [dec]`

Explanation An internal software error has occurred. A single packet that originated with this system could not be fragmented and has been dropped. Normal system operation will continue. This is a transient error; however, this condition indicates other errors in the software that will require further examination by your Cisco technical support representative.

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

Error Message

`%IPV6-4-DUPLICATE: Duplicate addressUnrecognized format ' %P' on [chars]`

Explanation Another system is using the same IPv6 address as this system.

Recommended Action Change the IPv6 address of one of the two systems.

Error Message

```
%IPV6-4-DUPLICATE_OPTIMISTIC: Duplicate addressUnrecognized format ' %P' on
[chars]
```

Explanation   You have elected not to run DAD, but another system is using your IPv6 address.

Recommended Action   Change the IPv6 address of one of the two systems.

Error Message

```
%IPV6-4-IDB: Interface [chars] state mismatch. [chars]
```

Explanation   An internal software error has occurred.

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

Error Message

```
%IPV6-4-LLA_CONFLICT: LLA conflict for static neighborUnrecognized format ' %P'
on [chars] : [chars]
```

Explanation   This error indicates that an ND message from the specified neighbor carries an LLA other than configured.

Recommended Action   Reconfigure the static neighbor with correct LLA.

Error Message

```
%IPV6-4-MAXPDB: Exceeded maximum supported IPv6 Routing Protocol instances
```

Explanation   This error indicates that configuration of a Routing Protocol has failed because it would exceed the maximum supported number of Routing Protocols.

Recommended Action   Reduce the number of IPv6 Routing Protocol instances configured.

Error Message

```
%IPV6-4-MULTICAST: Application does not support multicast destination address
[IPv6_addr], packet dropped.
```

Explanation An internal software error has occurred. A multicast destination address was used in an local application which does not yet handle IPv6 multicast.

Recommended Action Use a unicast address in commands on the router, if the problem persists, or you feel the command should support multicast, then copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPV6-6-ACCESSLOGDP: list [chars]/[dec] [chars] [chars]Unrecognized format ' %P'
[chars]-Unrecognized format ' %P' ([dec]/[dec]), [dec] packet[chars]
```

Explanation A packet matching the log criteria for the access list specified in the error message was detected.

Recommended Action No action is required.

Error Message

```
%IPV6-6-ACCESSLOGNP: list [chars]/[dec] [chars] [dec]Unrecognized format ' %P'
[chars]-Unrecognized format ' %P', [dec] packet[chars]
```

Explanation A packet matching the log criteria for the access list specified in the error message was detected.

Recommended Action No action is required.

Error Message

```
%IPV6-6-ACCESSLOGP: list [chars]/[dec] [chars] [chars]Unrecognized format '
%P'([dec]) [chars]-Unrecognized format ' %P'([dec]), [dec] packet[chars]
```

Explanation A packet matching the log criteria for the access list specified in the error message was detected.

Recommended Action No action is required.

Error Message

```
%IPV6-6-ACCESSLOGSP: list [chars]/[dec] [chars] [chars][ipv6_addr]
[chars]-[ipv6_addr], [dec] packet[chars]
```

Explanation A packet matching the log criteria for the given access list was detected.

Recommended Action No action is required.

Error Message

```
%IPV6-6-ROUTELIMITRECOVERED: IPv6 routing table limit recovered - [chars]
```

Explanation The number of routes in the named IPv6 routing table has fallen below the configured limit. The routing table has recovered.

Recommended Action No action is required.

Error Message

```
%IPV6FIB-2-FIBDOWN: IPv6 CEF has been disabled due to a low memory condition. It
can be re-enabled by configuring 'ipv6 cef [distributed]'
```

Explanation IPv6 CEF was disabled because of a low memory condition.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade the RP so that it has more DRAM.

Error Message

```
%IPV6FIB-2-RADIXINIT: Error initializing IPv6 CEF radix tree
```

Explanation Initialization of the radix tree could not be accomplished because of a low memory condition.

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

Error Message

```
%IPV6FIB-3-ASSERT: assertion '[chars]' failed [chars] line [dec]
```

Explanation An internal software error occurred.

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

Error Message

`%IPV6FIB-3-FIBTABLEINIT: CEF table creation failure - [chars], tableid [int]`

Explanation An internal software error occurred preventing the creation of a new CEF table.

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

Error Message

`%IPV6FIB-3-GLOBALSTATE: Inconsistent global state '[chars]' [chars]`

Explanation An internal software error occurred.

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

Error Message

`%IPV6FIB-3-MAXPATHS_EXCEEDED: Max paths is [dec], [dec] attempted. Address was [IP_address], mask was [IP_address]`

Explanation An internal software error occurred. There was an attempt to set up more than the supported number of routing paths. CEF switching has been disabled on this slot.

Recommended Action Investigate why the number of routing paths was exceeded.

Error Message

`%IPV6FIB-3-NDB: Prefix [IP_address][IP_netmask] received with zero total traffic count`

Explanation An internal software error occurred.

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

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

Error Message

%IPV6FIB-3-NOMEM: Malloc Failure, disabling [chars]

Explanation   An internal software error occurred. CEF switching has been disabled on this slot.

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

Error Message

%IPV6FIB-3-THREAD: Thread processing error: [chars]

Explanation   An internal software error occurred.

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

Error Message

%IPV6FIB-4-FIBCBLK: Missing cef table for tableid [int] during [chars] event

Explanation   An internal software error has occurred.

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

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

Error Message

```
%IPV6FIB-4-FIBIDB: Missing cef idb for [chars] during [chars]
```

Explanation   An internal software error occurred.

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

Error Message

```
%IPV6FIB-4-FIBIDBINDEX: Missing CEF idb for interface index [dec] during [chars]
```

Explanation   An internal software error occurred.

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

Error Message

```
%IPV6FIB-4-FIBREMOVE: Fibtype deletion execption: [chars]
```

Explanation   An internal software error occurred.

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

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

Error Message

```
%IPV6FIB-4-FIBSPECIALPREFIX: Invalid Special Prefix Type. Type [dec]
```

Explanation   An internal software error occurred.

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

Error Message

```
%IPV6FIB-4-FIBXDRINV: Invalid format. [chars]
```

Explanation   An internal software error occurred.

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

Error Message

```
%IPV6FIB-4-FIBXDRLEN: Invalid XDR length. Type/event [dec]/[chars]. XDR [dec],
buffer [dec]
```

Explanation   An internal software error occurred.

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

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

Error Message

```
%IPV6FIB-4-PUNTINTF: CEF punting packets switched to [chars] to next slower path
```

Explanation CEF cannot switch some or all packets out this interface, given its current configuration. CEF will punt packets switched to this interface to the next slower switching path.

Recommended Action If possible, configure CEF-supported and non-CEF-supported features on different subinterfaces.

Error Message

```
%IPV6FIB-4-RADIXINSERT: Error trying to insert prefix entry for [IP_address]/[dec]
```

Explanation An internal software error occurred.

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

Error Message

```
%IPV6FIB-5-NOPUNTINTF: CEF resuming switching packets to [chars]
```

Explanation CEF had been punting packets switched to this interface to the next slower switching path. The interface configuration has changed, and CEF can now resume switching to this interface.

Recommended Action No action is required.

Error Message

```
%IPV6_ACL-6-ACCESSLOGDP: list [chars]/[dec] [chars] [chars]
```

Explanation A packet matching the log criteria for the given access list has been detected.

Recommended Action No action is required.

Error Message

```
%IPV6_ACL-6-ACCESSLOGNP: list [chars]/[dec] [chars] [dec]
```

Explanation A packet matching the log criteria for the given access list has been detected.

Recommended Action No action is required.

Error Message

```
%IPV6_ACL-6-ACCESSLOGP: list [chars]/[dec] [chars] [chars]
```
Unrecognized format '%P'([dec]) [chars]-Unrecognized format ' %P'([dec]), [dec] packet[chars]

Explanation A packet matching the log criteria for the given access list has been detected.

Recommended Action No action is required.

Error Message

```
%IPV6_ACL-6-ACCESSLOGSP: list [chars]/[dec] [chars] [chars]
```
Unrecognized format ' %P' [chars]-Unrecognized format ' %P', [dec] packet[chars]

Explanation A packet matching the log criteria for the given access list has been detected.

Recommended Action No action is required. IPV6_RIP Messages

Recommended Action The following are the IPV6 RIP messages.

Error Message

```
%IPV6_ADDRESS-3-ADDRESS_CFG: %P/%d can not be configured on %s, %s
```

Explanation An error was encountered while configuring an IPv6 address

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPV6_ADDRESS-3-INTERNAL: Internal error, %s
```

Explanation An internal software error occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

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

Error Message

```
%IPV6_ADDRESS-3-NO_PROCESS: Cannot start an IPv6 process; router will not process
IPv6 packets.
```

Explanation An IPv6 process could not be started. This machine will not be able to process any IPv6
packets.

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

Error Message

```
%IPV6_ADDRESS-3-NO_UNIQUE_IDENTIFIER: Cannot determine an unique IPv6 identifier
for the system.IPv6 will not be started.
```

Explanation An unique IPv6 Identifier could not be determined for the system.Therefore the IPv6
process will not be started.This machine will not be able to process any IPv6 packets.

Recommended Action Verify that there is at least one interface in this machine that supports
IEEE-style addresses.

Error Message

```
%IPV6_ADDRMGR-3-INTERNAL: Internal error, %s
```

Explanation An internal software error occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

```
%IPV6_CLI-3-ADDRESS_CFG: %P/%d can not be configured on %s, %s
```

Explanation An error was encountered while configuring an IPv6 address

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case

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

Error Message

```
%IPV6_FORWARDING-3-NO_PROCESS: Cannot start an IPv6 forwarding process; router
will not process IPv6 packets.
```

Explanation   An IPv6 process could not be started. This machine will not be able to process any IPv6
packets.

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

Error Message

```
%IPV6_FORWARDING-3-NULLIDB: Uninitialized interface pointer - %s
```

Explanation   An internal software error occurred.

Recommended Action   Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

```
%IPV6_FORWARDING-3-NULLPAK: Uninitialized buffer pointer - %s
```

Explanation   An internal software error occurred.

Recommended Action   Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

```
%IPV6_FORWARDING-3-UNFRAGMENTABLE: Cannot fragment packet: unfragmentable part
length %d, MTU of %d
```

Explanation An internal software error occurred. A single packet originated by this system could not be fragmented and has been dropped. Normal system operation continues.

Recommended Action This is a transient error; however, this condition indicates other errors in the software that will require further examination by your Cisco technical support representative. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%IPV6_FORWARDING-4-MULTICAST: Application does not support multicast destination
address (%P), packet dropped.
```

Explanation An internal software error occurred. A multicast destination address was used in an local application which does not yet handle IPv6 multicast.

Recommended Action Use a unicast address in commands on the router, if the problem persists, or you feel the command should support multicast, then please contact the TAC with the failing command line.

Error Message

```
%IPV6_FW-6-SESS_AUDIT_TRAIL_CHANGE: [chars]Change to [chars] session: initiator
(Unrecognized format '[%P']:[dec]) sent [int] bytes -- responder (Unrecognized
format '[%P']:[dec]) sent [int] bytes
```

Explanation This message documents the change in protocol for an inspection session. The message is issued when a different protocol is detected in the session after the session has started. It records the source/destination addresses and ports and bytes transferred.

Recommended Action This message is for informational purposed only and indicates a protocol is using a port not registered for it. It can be used to collect the basic accounting for the inspected sessions.

Error Message

```
%IPV6_FW-6-SESS_AUDIT_TRAIL_START: [chars]Start [chars] session: initiator
(Unrecognized format '[%P']:[dec]) -- responder (Unrecognized format
'[%P']:[dec])
```

Explanation This message documents the opening of an inspection session. The message is issued at the start of each inspected session and it records the source/destination addresses and ports.

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

Error Message

```
%IPV6_ICMP-3-NULLPAK: Uninitialized buffer pointer - %s
```

Explanation An internal software error occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPV6_INTF-3-INTERNAL: Internal error, %s
```

Explanation An internal software error occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPV6_INTF-3-MIN_MTU: The link MTU of %s is below the %u-byte minimum IPv6 link
MTU.
```

Explanation As specified in the standard, IPv6 requires that every link has an MTU of at least 1280. Since this link's MTU is below that, IPv6 is held down on this interface.

Recommended Action No action is required.

Error Message

`%IPV6_INTF-3-NO_PROCESS: Cannot start IPv6 Interface Process.`

Explanation The IPv6 Interface Process could not be started. Interfaces will not be enabed for IPv6 Processing. This machine will not be able to process any IPv6 packets.

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

Error Message

`%IPV6_INTF-3-SET_MTU: The link MTU of %s is below the %u-byte user set IPv6 link MTU.`

Explanation The interface link MTU is below the user set IPv6 link MTU. IPv6 is held down on this interface.

Recommended Action No action is required.

Error Message

`%IPV6_INTF-4-L2_MISMATCH: High load on interface events (%s), auto-recovery complete.`

Explanation The router has automatically recovered from a condition normally brought about by high load. If this occurs frequently, please contact the TAC.

Recommended Action No action is required.

Error Message

`%IPV6_MIP-3-NO_PROCESS: Cannot start an IPv6 Mobile IP process; router will not process Mobile IPv6.`

Explanation An IPv6 process could not be started. This machine will not be able to process any Mobile IPv6 packets.

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

Error Message

`%IPV6_POLICY_API-4-IPV6_LOCALPOLICYOVERIDE: Local dynamic policy overriding static local policy`

Explanation Static policy and dynamic local policy are configured. The dynamic local policy will override the static local policy.

Recommended Action Remove the static local policy config if desired.

Error Message

```
%IPV6_POLICY_API-4-IPV6_POLICYOVERIDE: Dynamic policy overriding static on
intf:[chars]
```

Explanation   Static policy and dynamic policy are configured on the interface. The dynamic policy will override the static policy.

Recommended Action   Remove the static policy configuration, if desired.

Error Message

```
%IPV6_ND-3-CONFLICT: Router %P on %s conflicting ND setting %s
```

Explanation   Another router on the link sent router advertisements with conflicting parameters to ours.

Recommended Action   Verify that all IPv6 routers on the link have the same parameters in the router advertisement for hop-limit, managed-config-flag, other-config-flag, reachable-time and ns-interval, and that preferred and valid lifetimes for the same prefix, advertised by several routers are the same. Use the command show ipv6 interface to list the parameters per interface.

Error Message

```
%IPV6_ND-3-INTERNAL: Internal error, %s
```

Explanation   An internal software error occurred.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPV6_ND-3-NO_PROCESS: Cannot start an IPv6 Neighbor Discovery process; router
will not process IPv6 packets.
```

Explanation   An IPv6 process could not be started. This machine will not be able to process any IPv6 packets.

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

Error Message

```
%IPV6_ND-3-NULLDATA: Uninitialized data - %s
```

Explanation   An internal software error occurred.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPV6_ND-4-DUPLICATE: Duplicate address %P on %s
```

Explanation   Another system is using your IPv6 address.

Recommended Action   Change the IPv6 address of one of the two systems.

Error Message

```
%IPV6_ND-4-DUPLICATE_OPTIMISTIC: Duplicate address %P on %s
```

Explanation   You have elected not to run DAD, but another system is using your IPv6 address.

Recommended Action   Change the IPv6 address of one of the two systems.

Error Message

```
%IPV6_ND-4-DUPOLPFX: Prefix %P/%d advertised in RA on %s was previously learnt on
another interface
```

Explanation   This warning indicates that an on-link prefix advertised in an IPv6 ND RA on the specified interface has previously been learnt from an RA on another interface. The prefix will be ignored on the current interface

Recommended Action   Learning the same on-link prefix via IPv6 ND RA on multiple interfaces indicates a likely configuration error on adjacent routers. Review network topology and adjacent router configuration and correct as appropriate

Error Message

```
%IPV6_ND-4-LLA_CONFLICT: LLA conflict for static neighbor %P on %s  : %s
```

Explanation   This error indicates that an ND message from the specified neighbor carries a Link Layer Address other than that configured via static neighbor

Recommended Action   Reconfigure the static neighbor with correct LLA

Error Message

```
%IPV6_ND-4-OLPFXCON: Prefix %P/%d advertised in RA on %s has been previously
configured on another interface
```

Explanation This warning indicates that an on-link prefix advertised in an IPv6 ND RA on the specified interface has previously been configured on another interface. The prefix will be ignored on the current prefix

Recommended Action Learning an on-link prefix via IPv6 ND RA when the same prefix has previously been configured on another interface indicates a likely configuration error, either on the current router or on the neighbor router advertising the ND RA. Review network topology, current router and adjacent router configuration, and correct as appropriate

Error Message

```
%IPV6_ND-6-ADDRESS: %P/%d can not generate auto-configured address on %s, %s%s
```

Explanation IPv6 address could not be auto-configured.

Recommended Action NOG_STD_NO_ACTION

Error Message

```
%IPV6_RIP-3-NULLIDB: Uninitialized interface pointer - RIPv6
```

Explanation An internal software error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IPV6_ROUTING-3-INTERNAL: Internal error, %s
```

Explanation An internal software error occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPV6_ROUTING-3-RIB: %s`

Explanation An internal software error occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IPV6_ROUTING-3-ROUTELIMITEXCEEDED: IPv6 routing table limit exceeded - %s`

Explanation The number of routes in the named IPv6 routing table has reached the configured limit. No further routes will be added to the table

Recommended Action Reduce the number of routes in the table, or reconfigure the limit

Error Message

`%IPV6_ROUTING-3-ROUTELIMITWARNING: IPv6 routing table limit warning - %s`

Explanation The number of routes in the named IPv6 routing table has reached the configured warning limit.

Recommended Action Reduce the number of routes in the table, or reconfigure the limit

Error Message

`%IPV6_ROUTING-4-MAXPDB: Exceeded maximum supported IPv6 Routing Protocol instances`

Explanation This error indicates that configuration of a Routing Protocol has failed because it would exceed the maximum supported number of Routing Protocols

Recommended Action Reduce the number of IPv6 Routing Protocol instances configured

Error Message

`%IPV6_ROUTING-6-ROUTELIMITRECOVERED: IPv6 routing table limit recovered - %s`

Explanation The number of routes in the named IPv6 routing table has fallen below the configured limit. The routing table has recovered

Recommended Action No action is required.

IPX Messages

Error Message

```
%IPX-2-RADIXINIT: Error Initializing novell path structure
```

Explanation A programming error has occured

Recommended Action Please ensure that sufficient memory required to load this image is available in this device. If memory requirements are met, then follow the succeeding procedure. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%IPX-3-BADCOUNT: Bad IPX server count. %s %d, %s %d
```

Explanation The internal SAP service count does not match the number of services currently present and displayed by the show ipx servers command.

Recommended Action If this message recurs, report the problem to your echnical support representative, along with the output of the show ipx servers command taken before the message appeared and again after the message appeared.

Error Message

```
%IPX-3-BADHASHTABLE: Consistency check failed for SAP table %d.
```

Explanation An internal SAP table consistency check failed.

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

Error Message

```
%IPX-3-BADIGRPSAP: Cannot send incremental SAP update to peer on %s. Increasing
output-sap-delay may help
```

Explanation An incremental SAP update could not be sent, because this might cause the SAP tables between peers to become out of synch.

Recommended Action Increase the output SAP delay on the listed interface to reduce buffer usage. If, after changing the delay the message remains, copy the error message exactly as it appears and report it to your technical support representative.

Error Message

```
%IPX-3-BADIGRPSAPTYPE: Unsupported SAP type for EIGRP being %s - type %x
```

Explanation There are two types of service access points (SAPs)-general queries and general responses. This message is sent when you receive or attempt to send an SAP with a type code which is not a general query or a general response. It is also sent when you receive a general query not addressed to the broadcast address.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative. If possible, also provide the output of the debug ipx sap activity and debug ipx sap event commands for the period during which this message appeared.

Error Message

```
%IPX-3-BADINSERT: Duplicate SAP entry insert attempted. %s%s %s0x%x %s0x%x %s%d
%s0x%x %s0x%x %s0x%x
```

Explanation An IPX SAP service entry, which is being added currently, already exists in he current internal table.

Recommended Action Report the error messages and the tracebacks following them to your technical support representative.

Error Message

```
%IPX-3-BADPATHS: Invalid number of paths (%d) for %q
```

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

Recommended Action Copy and save this message. If possible, clear the IPX routing table by issuing the clear ipx route command. (This will result in lost connectivity until the routing table is rebuilt.) If the message recurs, copy and save the message, along with the output from the show ipx route, and call your technical support representative for assistance.

Error Message

```
%IPX-3-BADRDBDATA: Inconsistency in the %s LSP Linkage data structure detected.
```

Explanation An internal inconsistency was detected in the RDB or SRDB internal routing table structure. Specifically, a data area used by NLSP to link LSPs.

Recommended Action Copy and save this message. If NLSP is not running this could mean there is a software or hardware problem which is corrupting memory. If the message recurs, copy and save the messages, and call your technical support representative for assistance.

Error Message

```
%IPX-3-NOVNOSTART: IPX Failed to Start due to insufficient memory
```

Explanation The Novell IPX routing subsystem failed to properly initialize due to memory allocation errors, usually due to available memory being insufficient.

Recommended Action Obtain more free memory, look for a possible memory leak, or upgrade the system so that is has more memory.

Error Message

```
%IPX-3-TOOMANYNETS: Too many networks. The number of directly connected IPX
networks cannot exceed %d
```

Explanation The limit of connected IPX networks has been reached. Additional IPX interfaces cannot be configured.

Recommended Action Do not configure IPX on additional interfaces. Remove IPX configuration commands from inactive interfaces.

Error Message

```
%IPX-6-NOVACCESSLOG: %s %s %s %s %x.%e %s %x.%e %d pkt%s
```

Explanation If IPX access violation logging is enabled, these messages are displayed when an access list logging event has occurred.

Recommended Action Verify that the host system is permitted or denied as defined in the access list.

Error Message

```
%IPX-7-DEBUGMSG: %s: %08x %08x %08x %08x %08x
```

Explanation Internal use only

Recommended Action Should not be seen in the field

Error Message

```
%IP_ADM_HA_ISSU-3-ISSU_NOT_ALLOWED_WITH_WEBAUTH: Webauth is configured on an
interface. Device cannot be upgraded from or downgraded to an image that does not
have support for Webauth.
```

Explanation With Webauth configured on the system, it can not be upgraded from or downgraded to an image that does not have support for Webauth.

Recommended Action Remove Webauth related CLIs from all the interfaces, before attempting the image upgrade or downgrade.

IP_DEVICE_TRACKING Messages

Error Message

`%IP_DEVICE_TRACKING-4-TABLE_LOCK_FAILED: Table already locked by process-id %d(%s)`

Explanation The IP device tracking table could not be updated due to a lock held by another process

Recommended Action No action is required.

Error Message

`%IP_DEVICE_TRACKING_HA-3-FAIL_SEND_MSG_TO_ACTIVE: Failed to send %s message to active for %s, %s`

Explanation The specified synchronization message, which is an internal IPC message, could not be sent to the active unit in the specified run-time module. The failure most likely occurred because of a software error. Additional details on the nature of the error are specified in the message text on the console or in the system log. The system state between the active and standby units might not be properly synchronized.

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

Error Message

`%IP_DEVICE_TRACKING_HA-3-NO_RESOURCES: %s`

Explanation A run-time module could not obtain the resources that are required to complete a task. The failure most likely occurred because of a software error or a lack of system memory. Additional details on the nature of the error are specified in the message text on the console or in the system log. The system state between the active and standby units might not be properly synchronized.

Recommended Action If you determine that this condition was caused by a lack of system memory, reduce system activity to ease memory demands, or if conditions warrant, upgrade to a larger memory configuration. Otherwise, Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

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

Error Message

```
%IP_DEVICE_TRACKING_HA-4-ENTRY_OUT_OF_SYNC: Host mac-address %e ip-address %i
interface %s
```

Explanation   An inconsistency has been detected in the IP device tracking table for this host between active and standby

Recommended Action   No action is required.

IP_HOST Messages

Error Message

```
%IP_HOST-3-TABLEERR: Internal software error during HOST table operation for HOST
entry
```

Explanation   An internal software error has occurred during an HOST table operation.

Recommended Action   If the error 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IP_HOST_ISSU-2-GET_BUFFER: IP Host ISSU client failed to get buffer for message.
Error: %d (%s)
```

Explanation   The IP Host ISSU client failed to get buffer space for building a negotiation message. A negotiation message cannot be sent to the standby device. If a problem occurs with the ISSU session negotiation, the standby device cannot be brought up properly.

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

Error Message

```
%IP_HOST_ISSU-2-INIT: IP Host ISSU client initialization failed to %s. Error: %d
(%s)
```

Explanation   The IP Host ISSU client could not be initialized. This initialization failure must be addressed before in-service software upgrade or downgrade can be performed successfully. If you do not address this failure, there will be downtime during software upgrade or downgrade.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IP_HOST_ISSU-2-SEND_NEGO_FAILED: IP Host ISSU client failed to send negotiation
message. Error: %d (%s)
```

Explanation   The IP Host ISSU client failed to send a session negotiation message to the peer device. If a problem occurs with the ISSU session negotiation, the standby device cannot be brought up properly.

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

Error Message

```
%IP_HOST_ISSU-2-SESSION_NEGO: IP Host ISSU client encountered unexpected client
nego_done. Error: %d (%s)
```

Explanation   An ISSU-compliant client transitions through a series of internal states. The IP Host ISSU client encountered a 'client negotiation done' state that was unexpected. If a problem occurs with the ISSU session negotiation, the standby device cannot be brought up properly.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the commands and your pertinent troubleshooting logs. (show issu session and show issu negotiated capability)

Error Message

```
%IP_HOST_ISSU-2-SESSION_REGISTRY: IP Host ISSU client failed to register session
information. Error: %d (%s)
```

Explanation The IP Host ISSU client failed to register session information. If a problem occurs with the ISSU session registration, the standby device cannot be brought up properly.

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

Error Message

```
%IP_HOST_ISSU-3-CAP_INVALID_SIZE: IP_HOST ISSU client capability list is empty.
```

Explanation The IP_HOST ISSU client capability exchange list size is invalid.

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

Error Message

```
%IP_HOST_ISSU-3-CAP_NOT_COMPATIBLE: IP Host ISSU client capability exchange
result incompatible.
```

Explanation The IP Host ISSU client capability exchange have negotiated as incompatible with the peer.

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

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the commands and your pertinent troubleshooting logs. (show issu negotiated capability)

Error Message

```
%IP_HOST_ISSU-3-INVALID_SESSION: IP Host ISSU client does not have a valid
registered session.
```

Explanation The IP Host ISSU client does not have a valid registered session.

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

Error Message

```
%IP_HOST_ISSU-3-MSG_NOT_OK: IP Host ISSU client 'Message Type %d' is not
compatible
```

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

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

Error Message

```
%IP_HOST_ISSU-3-MSG_SIZE: IP Host ISSU client failed to get the MTU for Message
Type %d. Error: %d (%s)
```

Explanation The IP Host ISSU client failed to calculate the MTU for the specified message. The IP Host ISSU client is not able to send the message to the standby device.

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

Error Message

```
%IP_HOST_ISSU-3-SESSION_UNREGISTRY: IP Host ISSU client failed to unregister
session information. Error: %d (%s)
```

Explanation The IP Host ISSU client failed to unregister session information.

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

Error Message

```
%IP_HOST_ISSU-3-TRANSFORM_FAIL: IP Host ISSU client %s transform failed for
'Message Type %d'. Error: %d (%s)
```

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

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet

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

Error Message

```
%IP_PORT_SECURITY-4-DENY_INVALID_PACKET: Detected and dropped illegal traffic on
port %s and vlan %d, the non-cumulative packet dropped count is %ld.
```

Explanation IP Port Security only permits traffic with the correct source IP to MAC binding on the port or VLAN. There may be a malicious host trying to carry out a denial of service attack using another host's source address. The illegal traffic is dropped by the IP Port Security feature.

Recommended Action Identify the source of the illegal traffic and stop it.

IP_SNMP Messages

Error Message

```
%IP_SNMP-3-SOCKET: can't open UDP socket
```

Explanation The SNMP server was unable to open a port for receiving or transmitting SNMP requests. This usually happens when the SNMP server is started using the snmp-server community configuration command on a router or communication server with an interface that has no IP address configured. Another possible cause is low memory.

Recommended Action Configure at least one interface with an IP address or specify the no snmp-server command to remove the SNMP server process. Call your technical support representative if problems persist or if it becomes necessary to add memory.

Error Message

```
%IP_SNMP-4-NOTRAPIP: SNMP trap source %s has no ip address
```

Explanation The user entered an snmp-server trap-source command. The interface requested for use as the source address has no ipv4 address associated with it. The SNMP trap is being sent anyway, but without the source address that the user intended.

Recommended Action There are two possible solutions. Either enter a no snmp-server trap-source command to disable the request for a specific source IP address, or add an IP address to the interface referenced in the snmp-server trap-source configuration command.

Error Message

```
%IP_SNMP-4-NOTRAPIPV6: SNMP trap source %s has no ipv6 address
```

Explanation   The user entered an snmp-server trap-source command. The interface requested for use as the source address has no ipv6 address associated with it. The SNMP trap is being sent anyway, but without the source address that the user intended.

Recommended Action   There are two possible solutions. Either enter a no snmp-server trap-source command to disable the request for a specific source IP address, or add an IPV6 address to the interface referenced in the snmp-server trap-source configuration command.

Error Message

```
%IP_SNMP-4-TOOBIG: Oversize message from %i, datagram size %u, udp length %u
```

Explanation   An incoming SNMP packet had a length field so large that the system had to assume it was in error. This system made a correct reaction to bad external data. Since SNMP packets should originate from systems under the same administration, this may indicate that the network host used to originate the SNMP request had a problem in its networking layer. Alternatively, if the SNMP packet originated from outside the local administrative domain, it could indicate an failed attempt at security penetration and that site should be watched more closely.

Recommended Action   If the origin is local, no action is required. If the origin is determined to be malicious, either contact the administrator of the originating site or install filters to prevent access by that site, as circumstances warrant.

Error Message

```
%IP_SOURCE_GUARD-4-DENY_INVALID_PACKET: Detected and dropped illegal traffic on
port %s and vlan %d, the non-cumulative packet dropped count is %ld.
```

Explanation   IP Source Guard only permits traffic with the correct source IP to MAC binding on the port or VLAN. There may be a malicious host trying to carry out a denial of service attack using another host's source address. The illegal traffic is dropped by the IP Source Guard feature.

Recommended Action   Identify the source of the illegal traffic and stop it.

IP_VFR Messages

Error Message

```
%IP_VFR-3-COALESCE_ERROR: [chars] arriving through [chars] [chars]
```

Explanation   This message indicates miscellaneous errors in the VFR subsystem.

Recommended Action   If this error occurred because the VFR feature is unable to coalesce fragments, the problem could be due to malformed packets sent from the endpoints. These error messages can be avoided by using the workaround to increase the buffer size of the huge pool with buffers huge size command. More information about the malformed packet can be obtained with the debug ip virtual-reassembly command.

Error Message

```
%IP_VFR-3-INVALID_FRAG_LENGTH: [chars]: fragment length invalid - received from
[IP_address], destined to [IP_address]
```

Explanation This message indicates that the router has encountered a ping-of-death sort of an attack.

Recommended Action To prevent further attacks, its highly recommended that an ACL be configured to drop any traffic from the sender.

Error Message

```
%IP_VFR-3-OVERLAP_FRAGMENTS: [chars]: from the host [IP_address] destined to
[IP_address]
```

Explanation This message is logged whenever the router encounters overlap fragments. Overlap fragment means, offset of one fragment overlaps the offset of another fragment. For example, if first fragment's offset is 0 and length is 800, then the second fragments offset must be 800. If second fragment's offset is less than 800, that means the second fragment overlaps the first fragment.

Recommended Action This could possibly be an attack, configure a static ACL to prevent further overlap fragments from the sender.

Error Message

```
%IP_VFR-3-SYSTEM_ERROR: [chars]: IP VFR System failure - [chars]
```

Explanation This message indicates the misc errors in the VFR subsystem.

Error Message

```
%IP_VFR-4-FRAG_TABLE_OVERFLOW: [chars]: the fragment table has reached its maximum
threshold [dec]
```

Explanation This means the number of datagrams reassembled at a time reached its maximum limit, increase the value of max-reassemblies using ip virtual-reassembly max-reassemblies .

Recommended Action Unavailable

Error Message

```
%IP_VFR-4-TINY_FRAGMENTS: [chars]: from the host [IP_address] destined to
[IP_address]
```

Explanation This message indicates that the router is receiving tiny fragments -meaning the initial fragment does not have complete layer 4 header

Recommended Action This is an informational message.

Error Message

```
%IP_VFR-4-TOO_MANY_FRAGMENTS: [chars]: Too many fragments per datagram (more than
[dec]) - sent by [IP_address], destined to [IP_address]
```

Explanation   This message indicates the datagram being reassembled has received more fragments than its threshold value.

Recommended Action   Check if the fragments received are from a genuine source, if so increase the value of max-fragments using the CLI ip virtual-reassembly max-fragments .

Error Message

```
%IP_VFR-7-FEATURE_DISABLE_IN: VFR(in) is manually disabled through CLI; VFR
support for features that have internally enabled, will be made available only
when VFR is enabled manually on interface [chars]
```

Explanation   This message indicates that VFR is disabled manually using CLI. There are features that have internally enabled VFR at this point of time for which support will be provided only when VFR is manually enabled using CLI.

Recommended Action   No action is required.

Error Message

```
%IP_VFR-7-FEATURE_DISABLE_OUT: VFR(out) is manually disabled through CLI; VFR
support for features that have internally enabled, will be made available only
when VFR is enabled manually on interface [chars]
```

Explanation   This message indicates that VFR is disabled manually using CLI. There are features that have internally enabled VFR at this point of time for which support will be provided only when VFR is manually enabled using CLI.

Recommended Action   No action is required.

Error Message

```
%IP_VFR-7-FEATURE_STATUS_IN: VFR(in) is being used by other features. Will be
disabled when no other feature needs VFR support on interface [chars]
```

Explanation   This message indicates that there exists some feature which still need VFR support on the specified interface and hence VFR cannot be disabled at this point of time. VFR will be disabled when no other feature requires its support.

Recommended Action   No action is required.

Error Message

`%IP_VFR-7-FEATURE_STATUS_OUT: VFR(out) is being used by other features. Will be`
`disabled when no other feature needs VFR support on interface [chars]`

Explanation This message indicates that there exists some feature which still need VFR support on the specified interface and hence VFR cannot be disabled at this point of time. VFR will be disabled when no other feature requires its support.

Recommended Action No action is required.

Error Message

`%IP_VRF-3-MAX_VRF: [chars]`

Explanation Related to MAX number of VRFs.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IP_VRF-3-VRF_AF_ENABLE_ERROR: Failed to enable AF [dec] in VRF [chars], rc [dec]`

Explanation Failed to enable AF in a VRF.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IP_VRF-3-VRF_CACHE_ADD_ERROR: [chars]`

Explanation A cached VRF entry could not be created.

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

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

Error Message

%IP_VRF-3-VRF_CACHE_INIT_ERROR: [chars]

Explanation   A cached VRF entry could not be initialized.

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

Error Message

%IP_VRF-3-VRF_CACHE_UPDATE_IF_LIST_FAIL: [chars]

Explanation   Caching of Interface List update for VRF failed.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IP_VRF-3-VRF_CHKPT_TX_FAIL: [chars]

Explanation   The system has failed to send the VRF TABLEID checkpoint 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/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

`%IP_VRF-3-VRF_CMN_INVALID_PARAM: [chars]`

Explanation Invalid parameter.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%IP_VRF-3-VRF_CREATE_FAIL: [chars]`

Explanation The create function of the IP VRF has failed.

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

Error Message

`%IP_VRF-3-VRF_GET_BUF_FAIL: [chars]`

Explanation An attempt to get a checkpoint buffer for VRF NSF has failed.

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

Error Message

%IP_VRF-3-VRF_GET_LOCK_COUNT_ERROR: Failed to get lock count for VRF [chars] with error [chars]

Explanation Failed to lock count from a VRF.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IP_VRF-3-VRF_HDVRF_ERROR: HDVRF: [chars]

Explanation HDVRF related error messages.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IP_VRF-3-VRF_ID_INVALID_ERROR: Invalid VRF id [hex] in [chars]

Explanation VRF ID Invalid.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IP_VRF-3-VRF_IFLIST_NOT_EMPTY: VRF [chars] iflist is not empty in [chars]
```

Explanation   VRF iflist is not empty.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IP_VRF-3-VRF_IVRF_ERROR: [chars]
```

Explanation   VRF infrastructure failure for Platform VRFs.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IP_VRF-3-VRF_LCKMGR_CONTEXT_INIT_ERROR: Failed to initialize lock manager
context for vrf [chars]([dec]) with error [chars]
```

Explanation   VRF lock manager initialization failure.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IP_VRF-3-VRF_LCKMGR_INIT_ERROR: ([chars])

> **Explanation** VRF lock manager initialization failure.

> **Recommended Action** Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IP_VRF-3-VRF_LOCK_ERROR: Failed to lock VRF [chars]

> **Explanation** Failed to lock a VRF.

> **Recommended Action** Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IP_VRF-3-VRF_MALLOC_FAIL: Memory allocation failure

> **Explanation** VRF MALLOC failure.

> **Recommended Action** Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%IP_VRF-3-VRF_NSF_GEN_ERROR: [chars]

> **Explanation** A VRF NSF general error has occurred.

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

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

Error Message

%IP_VRF-3-VRF_TABLEID_INCONSISTENT: [chars]

Explanation A VRF TABLEID does not match on two RPs.

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

Error Message

%IP_VRF-3-VRF_TABLEID_INVALID: [chars]

Explanation VRF tableid invalid.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying
information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

%IP_VRF-3-VRF_TABLEID_NOTFREE: [chars]

Explanation An attempt has been made to allocate a VRF table ID that is already allocated.

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

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

Error Message

```
%IP_VRF-3-VRF_UNLOCK_ERROR: Failed to unlock VRF [chars]
```

Explanation   Failed to unlock a VRF.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%IP_VRF-4-VRF_DELETE_WAIT: The VRF [chars] is getting deleted after a wait
```

Explanation   There are routes remaining in the routing table of a VRF that has been deleted. To ensure reusability of the same VRF, the remaining routes will be deleted from the VRF routing table.

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

IRECAGENTSERVER Messages

The following are the IREC Agent Server messages.

Error Message

```
%IRECAGENTSERVER-3-NOINIT: Can't initialize iREC agent server
```

Explanation   Internal problems with initializing ports for the iREC agent server.

Recommended Action   Ensure that the iREC agent server port is available on the local machine.

Error Message

```
%IRECAGENTSERVER-3-NOMEM: Can't initialize memory for iREC agent server
```

Explanation   Insufficient Memory for iREC agent server.

Recommended Action   Increase amount of available memory.

Error Message

```
%IRECAGENTSERVER-3-NOPROC: Could not start iREC agent Server
```

Explanation   Internal Problem in process creation

Recommended Action   No action is required.

Error Message

```
%IRECAGENTSERVER-3-NOSOCKETS: Max Number of iREC agent Server sockets exceeded
```

Explanation   There are too many iREC agent clients requesting service.

Recommended Action   Reduce number of iREC agent requesting service.

IRONBUS Messages

Error Message

```
%IRONBUS-2-INIT_FAILED: Ironbus initialization failed on slot [dec], triggering
PXF exception.
```

Explanation   The IronBus could not be initialized. No traffic is passing from the line card. A PXF exception is being triggered to restart the PXF microcode and related subsystems to remedy this situation.

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

ISA Messages

The following are Integrated Services Adapter (ISA) messages.

Error Message

```
%ISA-1-ALIGN: Alignment failure on packet buffer: 0x%08x
```

Explanation A software error occurred. The ISA driver detected that the buffer is not aligned correctly.

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

Error Message

```
%ISA-1-ERROR: %s
```

Explanation An error occured in the application using ISA.

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

Error Message

```
%ISA-1-INITDESCRING: Slot %d: The ISA driver failed to allocate descriptor offsets
write_offsets: %x, read_offsets: %x, stored_offsets: %x
```

Explanation The ISA driver failed to initialize at the specified point.

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

Error Message

```
%ISA-1-INITFAIL: Slot %d: %s
```

Explanation The ISA driver failed to initialize at the specified point.

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

Error Message

```
%ISA-1-NOMEMORY: %s creation failed for slot %d
```

Explanation The ISA driver, in its initialization phase, could not allocate memory for the specified data structure.

Recommended Action Consider adding more shared memory. Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

```
%ISA-1-OWNER: %s packet buffer, pak=0x%08x
```

Explanation A software or hardware error occurred. The ISA driver detected that the buffer 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

```
%ISA-1-TOOBIG: %s received a packet with size %d.
```

Explanation Software supports upto **** MTU

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

Error Message

```
%ISA-6-INFO: %s
```

Explanation This is informational message from ISA

Recommended Action This is informational message from ISA. This occurs in normal operation.

Error Message

```
%ISA-6-SHUTDOWN: %s shutting down
```

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

Recommended Action This is an informational message only. It occurs in normal operation.

ISCSI Messages

Error Message

```
%ISCSI-2-FILESYS_CRIT: Info: File system([chars]:) [chars]
```

Explanation An unexpected condition was detected in the iSCSI Module.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISCSI-3-ERROR: Error: [chars]
```

Explanation An unexpected condition was detected in the Record Storage Module.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISCSI-3-WARNING: Warning: [chars]
```

Explanation An unexpected condition was detected in the Record Storage Module.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISCSI-4-UNEXPECTED: Error: [chars]
```

Explanation An unexpected error occurred while performing Record Storage Module.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISCSI-6-FILESYS: Info: File system([chars]:) [chars]
```

Explanation Informational message only

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

ISDN Messages

Error Message

```
%ISDN-1-NOMEMORY: msgtxt_nomemory
```

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

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

Error Message

```
%ISDN-2-ISDN_FATAL: ISDN FATAL ERROR  : file [chars], function [chars], message:
[chars]
```

Explanation ISDN has detected a fatal system error.

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

Error Message

```
%ISDN-2-ISDN_GENERAL_TRACEBACK: %s:%d
```

Explanation A debug - traceback condition has occurred

Recommended Action No action is required.

Error Message

```
%ISDN-3-ISDN_CCB_FREE: [chars]: CCB with call_id [hex] on b channel [dec] was
leaked, but has been freed by ISDN Housekeeping. Reason: [chars]
```

Explanation A data structure internal to ISDN has leaked.

Recommended Action No action is required.

Error Message

```
%ISDN-3-ISDN_CCB_FREE_FAILS: [chars]: CCB with call_id [hex] on b channel [dec]
was leaked (reason: [chars]), and can't be free'd by ISDN Housekeeping.
```

Explanation A data structure internal to ISDN has leaked and we can not fix it for some reason.

Recommended Action No action is required.

Error Message

```
%ISDN-3-ISDN_EXIT: [chars]
```

Explanation The ISDN task has terminated execution for the specified reason, and may cause CISCO IOS to terminate.

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

Error Message

```
%ISDN-3-ISDN_FATAL: ISDN FATAL ERROR: file [chars], function [chars], message:
[chars]
```

Explanation ISDN has detected a fatal system error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISDN-3-ISDN_RESOURCE_UNAVAILABLE: %s: Resource not available, at %s:%d
```

Explanation Hardware resource could not be allocated

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISDN-3-LAYER2_DOWN: Layer 2 for Interface [chars], TEI [int] changed to down
```

Explanation   This is an informational message but being logged as ERR at request from some customers. It is sent when an ISDN Layer2 logical link is down. It also shows the TEI associated with this logical link.

Recommended Action   No action is required.

Error Message

```
%ISDN-3-LAYER2_UP: Layer 2 for Interface [chars], TEI [int] changed to up
```

Explanation   This is an informational message but being logged as an ERR at request from some customers. It is sent when an ISDN Layer2 logical link is up. It also shows the TEI associated with this logical link.

Recommended Action   No action is required.

Error Message

```
%ISDN-4-BAD_DSL_FOR_CREATE_DELETE_L2: %s: isdn_create_delete_signalling_channel:
Unknown DSL %u for %s
```

Explanation   The Creation/Deletion service for the L2 Signalling handler for the given DSL is missing

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

Error Message

```
%ISDN-4-GET_STATUS_STATE_FAIL: %s: isdn_get_status_state: Unknown DSL %u
```

Explanation   An attempt to retrieve the status of a DSL that is not currently configured.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

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

Error Message

```
%ISDN-4-INVALID_CALLEDNUMBER: Interface %s, Ignoring call, LDN and Called Party
Number mismatch
```

Explanation The incoming ISDN call is ignored because the Called Party Number does not match the LDN numbers configured in the router.

Recommended Action Correct the LDN in the router to match the Called Party Number delivered in the incoming setup message.

Error Message

```
%ISDN-4-INVALID_EID: Interface %s, Ignoring call, EndPoint Identifier (EID)
mismatch
```

Explanation The incoming ISDN call is ignored because the EID delivered in the incoming setup message cannot be matched.

Recommended Action If EID is delivered in the setup message, use the isdn debugs and show isdn status commands to determine the current EID values. You may need to contact the service provider.

Error Message

```
%ISDN-4-INVALID_EVENT: %s: Bad Event Received For Current State
```

Explanation The State Transition for the ISDN L2 Socket Process failed.

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

Error Message

```
%ISDN-4-INVALID_SPID: Interface %s, Spid%d was rejected
```

Explanation The SPID configured in the router has been rejected by the switch.

Recommended Action Determine the correct SPID, reenter the SPID and clear the BRI interface.

Error Message

```
%ISDN-4-ISDN_CCB_LEAK: [chars]: CCB with call_id [hex] on b channel [dec] has been
leaked. Reason: [chars]
```

Explanation A data structure internal to ISDN seems to have been leaked.

Recommended Action No action is required.

Error Message

```
%ISDN-4-ISDN_L2_INTERFACE_NOT_REGISTERED: %s: isdn_to_L2  : Unknown DSL %u for
command %s
```

Explanation The ISDN Stack has not registered its L2 Message Handler

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

Error Message

```
%ISDN-4-ISDN_NLCB_LEAK: [chars]: NLCB leak detected. nlcb=[hex]
```

Explanation A data structure internal to ISDN has not been freed.

Recommended Action No action is required.

Error Message

```
%ISDN-4-ISDN_UNEXPECTED_EVENT: %s: Occurred at %s:%d
```

Explanation An unexpected event of significance has occurred

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

Error Message

```
%ISDN-4-OPEN_TEMP_SOCKET_FAIL: [chars]: Failed to Open Required Temporary
Socket[chars]
```

Explanation   The open or reopen attempt for a required temporary socket has failed. Without this socket, the Layer 2 socket process will fail.

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

Error Message

```
%ISDN-4-RESTART: Interface [chars] [chars] [chars] message with restart class of
[chars] chan [dec]
```

Explanation   This is an informational message but will logged as a warning message if so configured.

Recommended Action   No action is required.

Error Message

```
%ISDN-4-RLM_STATUS_CHANGE: ISDN SC %s: Status Changed to: %s.
```

Explanation   ISDN has been notified by the RLM component of a status change in the RLM link

Recommended Action   No action is required.

Error Message

```
%ISDN-4-SERVICE: Interface [chars] [chars] [chars] message for chan [dec] state
[chars]
```

Explanation   This is an informational message but will be logged as a warning message if so configured.

Recommended Action   No action is required.

Error Message

```
%ISDN-4-SERV_AUDIT_C1: Interface [chars] service audit trigger condition [dec] on
channel [dec]
```

Explanation This is an informational message but will be logged as a warning message if so configured.

Recommended Action No action is required.

Error Message

```
%ISDN-4-SPURIOUS_CONNECT: %s: Spurious Connection Accepted and Closed on port %u
```

Explanation An unknown TCP connection was accepted and refused.

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

Error Message

```
%ISDN-4-STATUS: Interface [chars] [chars] [chars] st [hex] ev [hex] cid [hex] cref
[hex]
```

Explanation This is an informational message but being logged as a warning message if so configured.

Recommended Action No action is required.

Error Message

```
%ISDN-5-SERV_AUDIT_C2: Interface [chars] service audit trigger condition [dec] on
channel [dec]
```

Explanation This is an informational message but will be logged as a warning message if so configured.

Recommended Action No action is required.

Error Message

```
%ISDN-6-CALL_COLLISION: Interface %s Call Cid 0x%x Cref 0x%x collision on Channel
%d in_use_cid 0x%x cref 0x%x, Channel awarded to the received call
```

Explanation This is an informational message. It is sent when a Call is received that collides with an existing call on the same channel.

Recommended Action No action is required.

Error Message

```
%ISDN-6-CHAN_UNAVAILABLE: Interface %s Requested Channel %d is not available
```

Explanation This is an informational message. It is sent when the requested channel is not available.

Recommended Action No action is required.

Error Message

```
%ISDN-6-CONNECT: Interface %s is now connected to %s %s
```

Explanation This is an informational message sent when a call is connected. The message displays the remote name and number, which it receives from the Point-to-Point Protocol (PPP) authentication or from where the dialer placed the call to.

Recommended Action No action is required.

Error Message

```
%ISDN-6-DISCONNECT: Interface %s disconnected from %s %s, call lasted %u seconds
```

Explanation This is an informational message sent when a call is disconnected. The message displays the remote name and number, which it receives from the Point-to-Point Protocol (PPP) authentication or from where the dialer placed the call to. It also shows how long the call lasted.

Recommended Action No action is required.

Error Message

```
%ISDN-6-INVALID_TIMER: %s: Invalid Timer Handle, caller 0x%x handle %3d
```

Explanation This could be an indication of low memory. It is sent when an invalid ISDN timer handle is passed on for timer operations

Recommended Action capture the show isdn mem, show isdn status output for possible debugging information. Reduce other system activity to ease the memory demands in the system.

Error Message

```
%ISDN-6-LAYER2DOWN: Layer 2 for Interface [chars], TEI [int] changed to down
```

Explanation This is an informational message. It is sent when an ISDN Layer2 logical link is down. It also shows the TEI associated with this logical link.

Recommended Action No action is required.

Error Message

```
%ISDN-6-LAYER2UP: Layer 2 for Interface [chars], TEI [int] changed to up
```

Explanation This is an informational message. It is sent when an ISDN Layer2 logical link is up. It also shows the TEI associated with this logical link.

Recommended Action No action is required.

Error Message

```
%ISDN-6-NFAS_STATUS_CHANGE: [chars] [chars] [chars] [chars]
```

Explanation The NFAS D-channel status has changed.

Recommended Action No action is required.

Error Message

```
%ISDN-6-NO_TIMER: No Free Timer Entry, caller 0x%x, timers used %d
```

Explanation This could be an indication of low memory. It is sent when the ISDN protocol cannot start new timers for it's operation.

Recommended Action capture the show isdn mem, show isdn status output for possible debugging information. Reduce other system activity to ease the memory demands in the system.

Error Message

```
%ISDN-6-REPEATED_SETUP: Interface [chars] Call Cid [hex] Cref [hex] received a
retransmitted setup on channel [dec] in_use_cid [hex] cref [hex].
```

Explanation This is an informational message sent when a duplicate SETUP message is received on a B-channel. This indicates that the rate of calls being received is momentarily greater than the rate calls can be processed. No action is required.

Recommended Action No action is required.

Error Message

```
%ISDN-6-SERV_AUDIT_C3: Interface [chars] service audit trigger condition [dec] on
channel [dec]
```

Explanation This is an informational message but will be logged as a warning message if so configured.

Recommended Action No action is required.

ISRHOG Messages

Error Message

```
%ISRHOG-2-NOMEM: No memory available for configuring ISRHOG
```

Explanation The ISRHOG protocol subsystem could not obtain the memory it required.

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

Error Message

```
%ISRHOG-4-MASK: Process masked interrupts for more than [int] microsecs
Process-Block-Time [int] microsecs
```

Explanation The process has blocked interrupts for more than the latency threshold set for the ISRHOG tool.

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

ISSU Messages

Error Message

```
%ISSU-3-ABORTVERSION: 'issu abortversion' CLI %s
```

Explanation The **issu abortversion** command can be run only from the load version or run version state.

Recommended Action Reinitialize the ISSU process.

Error Message

%ISSU-3-ACCEPTVERSION: 'issu acceptversion' CLI %s **Explanation** The ISSU acceptversion
command did not fulfill the necessary criteria. This can happen due to the following conditions not
being met.

- The ISSU state in active is not the runversion.

- The current version does not exist in active ROMMON.

- The primary version does not exist in active ROMMON.

- The primary version and current version are not the same due to some error.

- The current version does not exist on standby.

- The image names on standby primary version andcurrent version are different.

- The secondary version does not exist on the active ROMMON.

- The active secondary version and standby current versionare different.

Recommended Action Resolve the error and execute the command again.

Error Message %ISSU-5-AUTO_ROLLBACK: ional only.

Explanation The rollback timer for an ISSU install has expired.The auto-rollback process has begun.

Recommended Action No action is required.

Error Message

%ISSU-3-BOOT_SYNC: Problem with sync of ISSU boot state - %s

Explanation During boot time of the chassis there is ISSU statethat is synced between the FRU's, an
error occured duringthis operation.

Recommended Action Some errors will retry and state that it is retrying after which the system will
continue operating, or after a set of retries there will be another more severe error reported.

Error Message

%ISSU-0-BOOT_SYNC_FAIL: Problem with sync of ISSU boot state - %s

Explanation An ISSU state that is synchronized between the FRUs exists when the chassis reboots.
An error occurred when the chassis rebooted. The operation did not complete.

Recommended Action This is the final state after retries. The message indicates that some system
problem prevented successful synchronization. Copy the message exactly as it appears on the
console or in the system log. Research and attempt to resolve the issue using the tools and utilities
provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply
clarifying information. Search for resolved software issues using the Bug Toolkit at
http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance,
open a case with the Technical Assistance Center via the Internet at
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

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

Error Message

%ISSU-3-BOOT_UNCLEAN: Found reload log file, moved to %s

Explanation When the router processor booted, the log file indicated a failure to handle all the shutdown tasks on a previous reload.

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

Error Message

%ISSU-3-COMMITVERSION: 'issu commitversion' CLI %s

Explanation The **issu commit version** command did not fulfil the necessary criteria. This can happen when the following conditions are not fulfilled:

- – The current ISSU state is not run version.
- – The secondary version does not exist on the standby.
- – The standby BOOT variable does not exist.
- – The new image is not the first in BOOT on the standby.
- – The active BOOT variable is not set.
- – The primary version on active does not exist.
- – The new image is not the first in the active BOOT.
- – The configuration register low byte is not 0x02.

Recommended Action Resolve the error and execute the command again.

Error Message

%ISSU-3-CONFIGREG: %s

Explanation There has been some problem involving the setting or retrieving of the value of the configuration register.

Recommended Action Verify the current value of the configuration register and all activities that may have affected it.

Error Message

%ISSU-7-DEBUG: ion, record in case of future need.

Explanation Some debug output is being emitted.

Recommended Action No action is required.

Error Message

%ISSU-3-FILESYS: '%s' filesystem does not exist

Explanation The verification of the file system has failed.

Recommended Action Check for the flash disk inserted into the indicated file system. The file must be be downloaded to the flash disk.

Error Message

%ISSU-3-IMAGE: %s is loading the wrong image [%s]expected image [%s]

Explanation A wrong image is being loaded during the ISSU process.

Recommended Action Check the detailed state of ISSU process. Ensure that correct images are loaded on active and on standby.

Error Message

%ISSU-3-INCOMPAT: The packages %s and %s - %s

Explanation The installed packages that are being run on the chassis are not compatible with each other.

Recommended Action Install a compatible set of packages to enable normal operation.

Error Message

%ISSU-5-ISSU_STATE_INVALID: ISSU stored state found invalid and cleaned up: %s

Explanation The RP has booted with state that indicated a failed ISSU. This has been detected at boot time and has been cleaned up.

Recommended Action This is a regular clean up of a failed installation. No action is required.

Error Message

%ISSU-3-LOADVERSION: 'issu loadversion' CLI %s

Explanation The **issu loadversion** command did not fulfill the necessary criteria. This happens when the following conditions are not fulfilled.

- The standby is not ready.

- The active and/or standby unit IDs are incorrect.

- The ISSU process is not in the INIT state.

> – The active and/or standby image does not exist in the flash.

> – The image names are not the same.

> – The configuration register low byte is not 0x02.

Recommended Action Resolve the error and execute the command again.

Error Message

```
%ISSU-3-NVRAM: %s
```

Explanation The NVRAM variables are not set properly.

Recommended Action Resolve the error and execute the command again.

Error Message

```
%ISSU-3-PARAMETERS: %s (%s) parameters are wrong
```

Explanation The system could not be configured for ISSU.

Recommended Action Resolve the error and execute the command again.

Error Message

```
%ISSU-0-PKG_INCONSIST: Reason: %s
```

Explanation The packages being processed has an unexpected internal consistency error. The package is not appropriate to install or use.

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

Error Message

```
%ISSU-0-PKG_MNT_SCRIPT_FAIL: Package: %s
```

Explanation The packages being processed has encountered an error while executing the amount script. The message indicates that the package is unusable.

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

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

Error Message

%ISSU-3-PRST: %s

Explanation The persistent variables have not been set properly.

Recommended Action Resolve the error and execute the command again.

Error Message

%ISSU-0-RESET_FRU_FAIL: Problem with ISSU reset of remote FRU - %s

Explanation While installing the package, one or more of the remote FRUs have been set to be
upgraded due to new provision. One of these FRUs failed to come up with the new software within
the timeout period.

Recommended Action Check to the FRUs which had failed to come up. Reset that particular FRU or
reprovision with a different software package.

Error Message

%ISSU-3-RUNVERSION: 'issu runversion' CLI %s

Explanation The **issu runversion** command did not fulfill the necessary criteria. This can happen
when the following conditions are not fulfilled.

 – The standby is not in RF STANDBY HOT state.

 – The ISSU system state is not the load version.

 – The primary version does not exist in the active ROMMON.

 – The configuration register low byte is not 0x02.5.

 – The ISSU state could not be set to run version.

Recommended Action Resolve the error and execute the command again.

Error Message

%ISSU-3-RUNVERSION: 'issu runversion' CLI %s

Explanation The **issu runversion** command has not fulfilled the necessary criteria. This happens
when the following conditions are not fulfilled.

 – The standby is not in RF STANDBY HOT state.

 – The ISSU system state is not the load version.

 – The primary version does not exist in the ROMMON of the active router.

 – The configuration register low byte is not 0x02.5.

– The ISSU state could not be set to the run version.

Recommended Action Resolve the error and execute the command again.

Error Message

```
%ISSU-0-SOFTWARE_INVALID: Package for location %s: %s
```

Explanation The packages being processed has encountered an error relating to the structure of the loaded software for the FRU.

Recommended Action Reboot the RP or the affected linecard.

Error Message

```
%ISSU-3-SYSTEM: %s
```

Explanation The ISSU configuration failed due to an IPC problem,a platform problem, or a rommon problem.

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

Error Message

```
%ISSU-3-BAD_PARAMS: %s
```

Explanation Bad parameters are being passed

Recommended Action Copy the error and send it to TAC. TAC team can contact ISSU infrastructure team to investigate the problem.

Error Message

```
%ISSU-3-BASE_CLIENT_CHECK_COMPATIBILITY: %s
```

Explanation Error found during checking of ISSU base client compatibility

Recommended Action Copy the error and send it to TAC. TAC team can contact ISSU infrastructure team to investigate the problem.

Error Message

```
%ISSU-3-CLIENT_OR_ENTITY_NOT_REG:
Client([dec]) or entity([dec]) is not registered [chars].
```

Explanation A client or entity could not be registered.

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

Error Message

```
%ISSU-3-CLIENT_REG_DIST: Failed to %s distributed client %d
```

Explanation Distributed client reservation or unreservation failed

Recommended Action Copy the error and send it to TAC. TAC team can contact ISSU infrastructure team to investigate the problem.

Error Message

```
%ISSU-3-DEBUG_ERROR: [chars]
```

Explanation An error occurred when ISSU debugging was being enabled.

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

Error Message

```
%ISSU-3-DUMMY_VERSION_OUT_OF_RANGE: Dummy msg version (%d) is out of range for
msg(%d) under client %s(%d) and entity(%d).
```

Explanation   dummy msg version is out of range

Recommended Action   'show issu message type | include ' and copy the error and send it to TAC. TAC team can contact ISSU team to check why reported item is registered already

Error Message

```
%ISSU-3-DUMY_ENTRY_NOT_ALLOWED: Cap dumy entry is not allowed in mandatory case
for cap group([dec]) registration under client([dec]) and entity([dec])
```

Explanation   A cap dumy entry is not allowed in a mandatory case for a cap group registration.

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

Error Message

```
%ISSU-3-DUMY_ENTRY_NOT_LAST:
Dumy cap entry is not last one for cap group([dec]) registration under
client([dec]) and entity([dec])
```

Explanation   A dumy cap entry is not the last one for the cap group registration.

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

Error Message

```
%ISSU-3-DUP_DUMMY_VERSION_REG: %s is already registered under client %s(%d),
entity(%d), and msgtype(%d)
```

Explanation   Item is registered already under that msg type.

Recommended Action   'show issu message type | include ' and copy the error and send it to TAC. TAC team can contact ISSU team to check why reported item is registered already

Error Message

```
%ISSU-3-DUP_ENTITY_REG: Entity([dec]) is registered already under client([dec])
```

Explanation   An entity that is under the client has been duplicated.

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

Error Message

```
%ISSU-3-DUP_ITEM_IN_REG_UNDER_ENTITY: [chars] is duplicated [chars] under
client([dec]) and entity([dec])
```

Explanation   An item that is under the client and entity has been duplicated.

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

Error Message

```
%ISSU-3-DUP_REG_ENDPOINT:
Endpoint is registered already.
```

Explanation The endpoint has already been registered.

Recommended Action Enter the **show issu endpoint** command and check to see if the ISSU subsystem has been initialized twice.

Error Message

```
%ISSU-3-DUP_REG_UNDER_ENDPOINT: [chars]([dec]) is registered already under
endpoint.
```

Explanation An item under an endpoint has already been registered.

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

Error Message

```
%ISSU-3-DUP_REG_UNDER_ENTITY: [chars]([dec]) is registered already under
client([dec]) and entity([dec])
```

Explanation An item under a client and entity has already been registered.

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

Error Message

`%ISSU-3-EMPTY_DUMMY_VERSION: %s is empty under client %s(%d), entity(%d).`

Explanation dummy version is empty.

Recommended Action copy the error and send it to TAC. TAC team can contact ISSU team to check why reported item is registered already

Error Message

`%ISSU-3-EMPTY_UNDER_CLIENT: [chars] is empty under client([dec]).`

Explanation An item in the client is empty.

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

Error Message

`%ISSU-3-EMPTY_UNDER_ENDPOINT: [chars] is empty under endpoint.`

Explanation An item under an endpoint is empty.

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

Error Message

```
%ISSU-3-EMPTY_UNDER_ENTITY: [chars] is empty [chars] under client([dec]) and
entity([dec]).
```

Explanation An item in the client and entity is empty.

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

Error Message

```
%ISSU-3-ENDPOINT_NOT_REG:
Endpoint is not registered yet.
```

Explanation The endpoint has not yet been registered.

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

Error Message

```
%ISSU-3-ERP_AGENT: [chars]
```

Explanation One of the primary functions for the ERP agent has failed.

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

Error Message

`%ISSU-3-ERP_AGENT_SEND_MSG: [chars]; error code is [chars]`

Explanation The send message function call has failed.

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

Error Message

`%ISSU-3-ERP_CLIENT: [chars]`

Explanation One of the primary functions for the ERP client has failed.

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

Error Message

`%ISSU-3-ERP_CLIENT_EVENT: Unknown [chars] event - [dec]`

Explanation An unknown event was received.

Explanation One of the primary functions for the ERP agent has failed.

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

Error Message

`%ISSU-3-EXTERNAL_MATRIX_FILE_ERR: Line %u: %s`

Explanation External matrix file data is corrupted

Recommended Action An error was found in the external matrix data file. Open a case with TAC, and attach output of more ivfs:/ command, where is the output of dir system:image command.

Error Message

`%ISSU-3-FAILED_TO_ALLOC_CHUNK_MEMORY: [chars] type chunk allocation failed.`

Explanation Chunk memory allocation has failed.

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

Error Message

`%ISSU-3-FAILED_TO_ALLOC_DUMMY_VERSION: Can not allocate %s under client %s(%d) and entity(%d)`

Explanation Can not allocate dummy version under client and entity.

Recommended Action 'show proc mem' or 'show buffs' to check if memory or buffer is full. shutdown unused tasks or reset cards usually can recover those memory leak problem. Copy the error and send it to TAC if those actions does not help.

Error Message

`%ISSU-3-FAILED_TO_ALLOC_ENTITY: Can not allocate entity([dec]) under client([dec])`

Explanation An entity control block could not be allocated under a client.

Recommended Action Enter the **show processes memory** or **show buffers** command to check to see if the memory or buffer is full. Shut down unused tasks or reset cards to attempt to recover from a memory leak problem. If you require further assistance, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

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

Error Message

```
%ISSU-3-FAILED_TO_ALLOC_FUNCT_UNDER_ENDPOINT:
Can not allocate [chars].
```

Explanation A function callback operation could not be allocated.

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

Error Message

```
%ISSU-3-FAILED_TO_ALLOC_FUNCT_UNDER_ENTITY: Can not allocate [chars] under
client([dec]) and entity([dec])
```

Explanation A control block could not be allocated under the client and entity.

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

Error Message

```
%ISSU-3-FAILED_TO_ALLOC_MEMORY: memory allocation for %s failed.
```

Explanation malloc failed.

Recommended Action copy the error and send it to TAC. TAC team can contact ISSU client team

Error Message

```
%ISSU-3-FAILED_TO_ALLOC_UNDER_ENDPOINT: Can not allocate [chars]([dec]) control
block.
```

Explanation A control block could not be allocated.

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

Error Message

```
%ISSU-3-FAILED_TO_ALLOC_UNDER_ENTITY: Can not allocate [chars]([dec]) under
client([dec]) and entity([dec])
```

Explanation A control block could not be allocated under the client and entity.

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

Error Message

```
%ISSU-3-FAILED_TO_ALLOC_UNDER_GROUP: Can not allocate [chars]([dec]) for
[chars]([dec]) registration under client([dec]) and entity([dec])
```

Explanation An item under the client and entity could not be allocated for a group registration.

Recommended Action Enter the **show processes memory** or **show buffers** command to check to see if the memory or buffer is full. Shut down unused tasks or reset cards to attempt to recover from a memory leak problem. If you require further assistance, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance,

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

Error Message

```
%ISSU-3-FAILED_TO_ALLOC_UNDER_MSG: Can not allocate [chars] for msg ([dec])
registration under client([dec]) and entity([dec])
```

Explanation An control block could not be allocated for message registration.

Recommended Action Enter the **show processes memory** or **show buffers** command to check to see
if the memory or buffer is full. Shut down unused tasks or reset cards to attempt to recover from a
memory leak problem. If you require further assistance, copy the message exactly as it appears on
the console or in the system log. Research and attempt to resolve the issue using the tools and
utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will
supply clarifying information. Search for resolved software issues using the Bug Toolkit at
http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance,
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http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the information you have gathered. Attach the
following information to your case in nonzipped, plain-text (.txt) format: the output of the **show
logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%ISSU-3-FAILED_TO_ALLOC_UNDER_MSG_SES: Can not allocate [chars] for msg
session([dec]) registration under client([dec]) and entity([dec])
```

Explanation An control block could not be allocated for a message session registration.

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

Error Message

```
%ISSU-3-FAILED_TO_CREATE_ID32_SPACE: Failed to create ID32 space.
```

Explanation ID32 space could not be created.

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

Error Message

```
%ISSU-3-FAILED_TO_INIT_ISSU_PROTO:
Failed to initialize ISSU proto.
```

Explanation An ISSU protocol could not be initialized.

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

Error Message

```
%ISSU-3-FAILED_TO_UNREG_SES: Failed to unregister [chars] session under
client([dec]) and entity([dec])
```

Explanation A session could not be unregistered.

Recommended Action Enter the **show processes memory** or **show buffers** command to check to see if the memory or buffer is full. Shut down unused tasks or reset cards to attempt to recover from a memory leak problem. If you require further assistance, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

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

Error Message

%ISSU-3-FOF_NEGO_RESULT_INCONSISTENT: FOF owner msg type %d of owner client %s(%d) entity %d.Local endpoint %d, peer endpoint %d

Explanation An owner FOF message of interest to an using client has inconsistent negotiation results in different owner sessions under the same entity

Recommended Action Copy the error and send it to TAC. TAC team can contact ISSU infrastructure team to investigate the problem.

Error Message

%ISSU-3-FOREIGN_OWNED_FIELDS: %s; err code [%s]

Explanation Foreign owned field transformation failed

Recommended Action Copy the error and send it to TAC.

Error Message

%ISSU-3-FSM_BADMSG: Session [dec] in received message [chars] is wrong.

Explanation Sessions are mismatched on the peers, or sessions could not be found.

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

Error Message

%ISSU-3-FSM_DUP_UID: Duplicate unique_id on session [dec]: my_uid [dec], peer_uid [dec].

Explanation Endpoints with duplicate IDs have been detected. Each endpoint must have a distinctive identifier.

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

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

Error Message

```
%ISSU-3-FSM_INIT:
Fail to create process during FSM init.
```

Explanation   An FSM timer process could not be created.

Recommended Action   Check system resources at the time of system bootup.

Error Message

```
%ISSU-3-FSM_MISMATCH_MTU: ISSU nego failed for client %s(%d) entity_id %d session
%d due to mismatch of mtu size %d  %d.
```

Explanation   ISSU nego failed due to mismatch nego version mtu size.

Recommended Action   'show issu message types ' and copy the error and send it to TAC. TAC team
can contact ISSU client team to check why this runtime error occurs. Use 'show issu fsm | include
'to get error reason for futher debug.

Error Message

```
%ISSU-3-FSM_NEGO_SEND_ERR: Client '%s' with ID %d encountered '%s' in session %d.
```

Explanation   Failied to send ISSU negotiation message

Recommended Action   'show issu session | include ', 'show issu fsm , and copy the error and send it
to TAC. TAC team can contact ISSU client team to check why this error occurs.

Error Message

```
%ISSU-3-FSM_RUNTIME_ERR: [chars] occurs during FSM negotiation in session [dec].
```

Explanation   A runtime error occurred while the FSM was being negotiated.

Recommended Action   Copy the message exactly as it appears on the console or in the system log.
Enter the **show issu client | grep** client-id command, with client-id being the client ID specified in
the message text, to gather data that may help identify the nature of the error. Research and attempt
to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some
messages, these tools and utilities will supply clarifying information. Search for resolved software
issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl.
If you still require assistance, open a case with the Technical Assistance Center via the Internet at
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the information you have gathered. Attach the

following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging**, **show tech-support** and **show issu client | grep** client-id command with client-id being the client ID specified in the message text, and your pertinent troubleshooting logs.

Error Message

```
%ISSU-3-HANDLE_SIZE: Handle buffer size is %d, should be %d
```

Explanation Statically defined handle buffer size is incorrect

Recommended Action Copy the error and send it to TAC. TAC team can contact ISSU infrastructure team to investigate the problem.

Error Message

```
%ISSU-3-INCOMPATIBLE_BASE_CLIENTS: %s
```

Explanation List of ISSU base clients found incompatible

Recommended Action Copy the error and send it to TAC. TAC team can contact ISSU infrastructure team to investigate the problem.

Error Message

```
%ISSU-3-INCOMPATIBLE_PEER_UID: Setting image (%s), version (%s) on peer uid (%d)
as incompatible
```

Explanation Peer is incompatible

Recommended Action A runtime exception occurred in the previous run.Clear the condition according to the client, eg. config-sync and reload the Standby

Error Message

```
%ISSU-3-INCONSISTENT_MSG_TYPE: %s
```

Explanation Message types passed for foreign owned fields are inconsistent

Recommended Action A runtime registration error has occurred. Copy the error and send it to TAC.

Error Message

```
%ISSU-3-INTERRUPT_LEVEL_SESSION_OPERATION: %s %s %d %s %d
```

Explanation ISSU session registeration or unregisterationshould not be done at interrupt level

Recommended Action Copy the error and send it to TAC. TAC team can contact ISSU infrastructure team to investigate the problem.

Error Message

`%ISSU-3-INVALID_ITEM_UNDER_ENDPOINT: Invalid [chars] under endpoint`

Explanation An invalid item has been detected under the endpoint.

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

Error Message

`%ISSU-3-INVALID_ITEM_UNDER_ENTITY: Invalid [chars] under client([dec]) and entity([dec])`

Explanation An invalid item has been detected under the client and entity.

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

Error Message

`%ISSU-3-INVALID_PARAM_UNDER_SES: Invalid params %s under session(%d)`

Explanation Invalid parameters under session

Recommended Action 'show issu session | include ' to find out which client's session is causing this error msg. copy the error and send it to TAC. TAC team can contact ISSU team to check why invalid params is used if problem reported. Otherwise contact ISSU infrastructure team instead

Error Message

```
%ISSU-3-INVALID_VERSION_LOWHIGH: Invalid low([dec]) and high([dec]) value for
msg([dec]) under client([dec]) and entity([dec]).
```

Explanation An invalid low and high value for group registration has been detected.

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

Error Message

```
%ISSU-3-IN_USE_UNDER_ENDPOINT: [chars]([dec]) is in use under endpoint
```

Explanation Item is in use under endpoint.

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

Error Message

```
%ISSU-3-IN_USE_UNDER_ENTITY: [chars]([dec]) is in use under client([dec]) and
entity([dec])
```

Explanation An item under the client and entity is already in use.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show issu client | grep** client-id command, with client-id being the client ID specified in the message text, to gather data that may help identify the nature of the error. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support

representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging**, **show tech-support** and **show issu client | grep** client-id command with client-id being the client ID specified in the message text, and your pertinent troubleshooting logs.

Error Message

```
%ISSU-3-IPC_PORT: Port name '[chars]' failure; reason is '[chars]'.
```

Explanation The specified port could not be created or removed for the IPC function.

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

Error Message

```
%ISSU-3-ISSU_INIT_NOT_COMPLETE: %s
```

Explanation ISSU initialization has not been completed

Recommended Action Copy the error and send it to TAC. TAC team can contact ISSU infrastructure team to investigate the problem.

Error Message

```
%ISSU-3-JID: Failed to get the local process JID with err %d
```

Explanation The system manager call to collect the job-id failed

Recommended Action Copy the error and send it to TAC. TAC team can contact ISSU infrastructure team to investigate the problem.

Error Message

```
%ISSU-3-MISSING_DUMY_ENTRY_IN_REG: Dumy cap entry is missed for cap group([dec])
registration under client([dec]) and entity([dec])
```

Explanation A dumy cap entry could not be found for a cap group registration.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show issu client | grep** client-id command, with client-id being the client ID specified in the message text, to gather data that may help identify the nature of the error. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl.

If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging**, **show tech-support** and **show issu client | grep** client-id command with client-id being the client ID specified in the message text, and your pertinent troubleshooting logs.

Error Message

```
%ISSU-3-MISSING_ITEM_IN_REG: [chars]([dec]) is not available [chars] under
client([dec]) and entity([dec])
```

Explanation An item is not available for registration.

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

Error Message

```
%ISSU-3-MSG_NEGO_RESULT_CHUNK: Failed to %s element %x
```

Explanation Failed to lock or free the message negociation result chunk element

Recommended Action MSG negociation result element is locked and unlocked during avl_walk_extended of msg_nego_result_cb_root. The failure to lock or free of the element indicates invalid element or corrupted chunk memory. Copy the error and send it to TAC. TAC team can contact ISSU infrastructure team to investigate the problem.

Error Message

```
%ISSU-3-MSG_SES_IN_MSG_NOT_FOUND: The intended session %d specified in received
%s for client %s(%d) is not found.
```

Explanation Cannot find the session with the session id specified in the received message.

Recommended Action 'show issu session | include ' and copy the error and send it to TAC. TAC team can contact ISSU client team to make sure that receiving path uses correct session id.

Error Message

```
%ISSU-3-NON_ISSU_ID_UNDER_ENDPOINT: Non ISSU [chars]
```

Explanation The specified peer endpoint does not support ISSU.

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

Error Message

```
%ISSU-3-NOT_DUMY_CAP_TYPE: Cap type([dec]) is not dumy one.
```

Explanation The cap type is not a dumy cap type.

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

Error Message

```
%ISSU-3-NOT_FIND_ENTITY: Can not find entity([dec]) under client([dec]).
```

Explanation An entity under the client could not be found.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show issu client | grep** client-id command, with client-id being the client ID specified in the message text, to gather data that may help identify the nature of the error. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the

following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging**, **show tech-support** and **show issu client | grep** client-id command with client-id being the client ID specified in the message text, and your pertinent troubleshooting logs.

Error Message

%ISSU-3-NOT_FIND_FUNCT_UNDER_SESSION: Can not find [chars] under [chars] session([dec]).

Explanation   A function under the session could not be found.

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

Error Message

%ISSU-3-NOT_FIND_MSG_SES: Can not find message ssesion([dec]) [chars].

Explanation   A message session could not be found.

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

Error Message

```
%ISSU-3-NOT_FIND_UNDER_ENDPOINT: Can not find [chars]([dec]) control block under
endpoint.
```

Explanation A control block could not be found under the endpoint.

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

Error Message

```
%ISSU-3-NOT_FIND_UNDER_ENTITY: Can not find [chars]([dec]) control block under
client([dec]) and entity([dec]).
```

Explanation A control block could not be found under the client and entity.

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

Error Message

```
%ISSU-3-NOT_FIND_UNDER_SESSION: Can not find [chars]([dec]) under [chars]
session([dec]).
```

Explanation An item could not be found under the session.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show issu client | grep** session-id command, with session-id being the session ID specified in the message text, to gather data that may help identify the nature of the error. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance,

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representative and provide the representative with the information you have gathered. Attach the
following information to your case in nonzipped, plain-text (.txt) format: the output of the **show
logging**, **show tech-support** and **show issu client | grep** session-id command with session-id being
the session ID specified in the message text, and your pertinent troubleshooting logs.

Error Message

```
%ISSU-3-NOT_REG_UNDER_ENDPOINT: [chars]([dec]) is not registered under endpoint.
```

Explanation   An item could not be registered under the endpoint.

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

Error Message

```
%ISSU-3-NOT_REG_UNDER_ENTITY: [chars]([dec]) is not registered under
client([dec]) and entity([dec])
```

Explanation   An item could not be registered Item is not registered under client and entity.

Recommended Action   Copy the message exactly as it appears on the console or in the system log.
Enter the **show issu client | grep** client-id command, with client-id being the client ID specified in
the message text, to gather data that may help identify the nature of the error. Research and attempt
to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some
messages, these tools and utilities will supply clarifying information. Search for resolved software
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http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the information you have gathered. Attach the
following information to your case in nonzipped, plain-text (.txt) format: the output of the **show
logging**, **show tech-support** and **show issu client | grep** client-id command with client-id being the
client ID specified in the message text, and your pertinent troubleshooting logs.

Error Message

`%ISSU-3-NO_PEER_UID: No peer uid found at [chars]`

Explanation   No peer UID with this value is in the ISSU Database.

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

Error Message

`%ISSU-3-NO_UID: No uid ([dec]) registered with ISSU at [chars]`

Explanation   No UID with this value could be found in the ISSU database.

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

Error Message

`%ISSU-3-NULL_CALLBACK_UNDER_ENDPOINT: [chars] callback is NULL for registration.`

Explanation   The callback for registration is of a null value.

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

Error Message

```
%ISSU-3-NULL_CALLBACK_UNDER_ENTITY: [chars] callback is NULL for msg session
registration under client([dec]) and entity([dec])
```

Explanation The callback for a message session registration is of a null value.

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

Error Message

```
%ISSU-3-NULL_CALLBACK_UNDER_SESSION: Can not register null [chars] callback in
[chars] session([dec]).
```

Explanation A callback with a null value could not be registered in the session.

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

Error Message

```
%ISSU-3-PEER_IMAGE_INCOMPATIBLE: Peer image (%s), version (%s) on peer uid (%d)
is incompatible
```

Explanation Peer is incompatible

Recommended Action A runtime exception occurred in the previous run.Clear the condition according to the client, eg. config-sync and reload the Standby

Error Message

```
%ISSU-3-PEER_IMAGE_NOT_IN_INCOMP_LIST: Peer image (%s), version (%s) on peer uid
(%d) is not in the incompatible images list
```

Explanation Peer is incompatible

Recommended Action A runtime exception occurred in the previous run.Clear the condition
according to the client, eg. config-sync and reload the Standby

Error Message

```
%ISSU-3-PEER_IMAGE_REM_FROM_INCOMP_LIST: Peer image (%s), version (%s) on peer uid
(%d) being removed from the incompatibility list
```

Explanation Peer is incompatible

Recommended Action A runtime exception occurred in the previous run.Clear the condition
according to the client, eg. config-sync and reload the Standby

Error Message

```
%ISSU-3-PEER_INCOMP_SET: Peer incompatibility set for image (%s), version (%s) on
peer uid (%d)
```

Explanation Peer is incompatible

Recommended Action A runtime exception occurred in the previous run.Clear the condition
according to the client, eg. config-sync and reload the Standby

Error Message

```
%ISSU-3-PEER_UID_CB_IS_NULL: Peer uid control block is NULL
```

Explanation Peer is incompatible

Recommended Action A runtime exception occurred in the previous run.Clear the condition
according to the client, eg. config-sync and reload the Standby

Error Message

```
%ISSU-3-PROTO_CLIENT_ENTITY_UNREG: Proto Client entity unreg for [chars] has
failed
```

Explanation The protocol client has failed to unregister its entity with ISSU.

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

Error Message

%ISSU-3-PROTO_CLIENT_REG: Proto Client registration for [chars] has failed

Explanation The protocol client could not be registered with ISSU.

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

Error Message

%ISSU-3-REF_TREE: %s reference tree %s failed

Explanation The AVL based ISSU reference tree operation failed

Recommended Action Copy the error and send it to TAC. TAC team can contact ISSU infrastructure team to investigate the problem.

Error Message

%ISSU-3-SESSION_ID_ERROR: Failed to %s session id %d for %s

Explanation Session ID related operation failed

Recommended Action Copy the error and send it to TAC. TAC team can contact ISSU infrastructure team to investigate the problem.

Error Message

%ISSU-3-SESSION_RENEGOTIATE: Client Attemptiong to renegotiate on session [dec]

Explanation A Client is attempting to renegotiate a session without unregistering it and do the negotiation over again. This is not allowed and is considered an error condition.

Recommended Action Unregister the message session first and then re-register and attempt the negotiation.

Error Message

```
%ISSU-3-SET_UNKNOWN_UID: Unknown unique_id is set.
```

Explanation An unknown ID was set for the endpoint.

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

Error Message

```
%ISSU-3-TRANSPORT_ERP_UID_CB_IS_NULL: Transport ERP uid control block is NULL
```

Explanation Peer is incompatible

Recommended Action A runtime exception occurred in the previous run.Clear the condition according to the client, eg. config-sync and reload the Standby

Error Message

```
%ISSU-3-UNKNOWN_ENTITY_ID: Unknown entity id under client([dec])
```

Explanation An unknown entity ID was found under the client.

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

Error Message

```
%ISSU-3-UNKNOWN_ID_UNDER_ENDPOINT: Can not use unknown [chars].
```

Explanation An unknown ID has been detected.

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

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

Error Message

%ISSU-3-UNKNOWN_ID_UNDER_ENTITY: Unknown [chars] under client([dec]) and
entity([dec])

Explanation   An unknown ID has been found under the client and entity.

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

Error Message

%ISSU-3-VERSION_LOWHIGH_NOT_MATCH_TABLE_SIZE: Version low([dec]) and high([dec])
value for msg([dec]) does not match table size([dec]) under client([dec]) and
entity([dec]).

Explanation   The low and high values that were used for the message do not match the table size.

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

Error Message

```
%ISSU-3-VERSION_OUT_OF_ORDER: Msg version([dec],[dec]) is out of order for
msg([dec]) under client([dec]) and entity([dec]).
```

Explanation The message version is out of order for a group registration operation.

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

Error Message

```
%ISSU-3-VERSION_OUT_OF_RANGE: Msg version([dec],[dec]) is out of range for
msg([dec]) under client([dec]) and entity([dec]).
```

Explanation A message version is out of the configured range for a group registration.

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

Error Message

```
%ISSU-4-FSM_INCOMP: Version of local ISSU client [dec] in session [dec] is
incompatible with remote side.
```

Explanation The protocol versions of the local and remote clients are incompatible. These clients cannot communicate with each other.

Recommended Action Enter the **show version** and **show issu clients** commands to help verify that the software images are incompatible. Upgrade the software images on each unit to versions that are compatible. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit

http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in non-zipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%ISSU-4-MSG_INCOMP: Message([dec]) is incompatible under msg session([dec]).
```

Explanation   The specified message is incompatible under the specified message session.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Enter the **show issu session | grep** and **show issu fsm | grep** commands to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in non-zipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%ISSU-4-NEGO_NOT_FINISHED: Negotiation is not finished for client [dec], msg session([dec]).
```

Explanation   Negotiation is not finished for the specified client and message session.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Enter the **show issu session | grep** and **show issu fsm | grep** commands to gather data that might help identify the nature of the message. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the gathered information. Attach the following information to your case in non-zipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%ISSU-5-FSM_INCOMP:
Version of local ISSU client [dec] in session [dec] is incompatible with remote
side.
```

Explanation The protocol versions of the local and remote clients are incompatible. These clients can not communicate with each other.

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

Error Message

```
%ISSU-5-MSG_INCOMP:
Message([dec]) is incompatible under msg session([dec]).
```

Explanation A message is incompatible under a message session.

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

Error Message

```
%ISSU-5-NEGO_NOT_FINISHED: Negotiation is not finished for msg session([dec]).
```

Explanation Negotiation could not be completed for a message session.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show issu client | grep** session-id command, with session-id being the session ID specified in the message text, to gather data that may help identify the nature of the error. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved

software issues using the Bug Toolkit at
http://www.cisco.com/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance,
open a case with the Technical Assistance Center via the Internet at
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the information you have gathered. Attach the
following information to your case in nonzipped, plain-text (.txt) format: the output of the **show
logging**, **show tech-support** and **show issu client | grep** session-id command with session-id being
the session ID specified in the message text, and your pertinent troubleshooting logs.

Error Message

%ISSU_CS-3-BULK_CONFIG_TR: [chars] [chars]

Explanation An attempt to transform and synchronize the ISSU bulk configuration synchronization
file has failed.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Copy the system configuration along with any other relevant 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/pcgi-bin/Support/Bugtool/launch_bugtool.pl.
If you still require assistance, open a case with the Technical Assistance Center via the Internet at
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the information you have gathered. Attach the
following information to your case in nonzipped, plain-text (.txt) format: the output of the **show
logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%ISSU_CS-3-DL: [chars] [chars]

Explanation An error has occurred involving a list of ISSU changes.

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Copy the system configuration along with any other relevant 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/pcgi-bin/Support/Bugtool/launch_bugtool.pl.
If you still require assistance, open a case with the Technical Assistance Center via the Internet at
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the information you have gathered. Attach the
following information to your case in nonzipped, plain-text (.txt) format: the output of the **show
logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%ISSU_CS-3-DL_STATS: [chars][dec][chars]

Explanation This message provides statistics regarding the ISSU configuration synchronization file.

Recommended Action No action is required.

Error Message

```
%ISSU_CS-3-LBL_CONFIG_TR: [chars] [chars]
```

Explanation A line-by-line transformation operation has failed for the ISSU configuration synchronization file.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Copy the system configuration along with any other relevant 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/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%ISSU_CS-3-SKL: [chars] [chars]
```

Explanation A skip list operation failed for the ISSU configuration synchronization file.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Copy the system configuration along with any other relevant 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/pcgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs. ISSU_CS_DL_MESSAGES Messages

Recommended Action The following are in-service software upgrade (ISSU) configuration synchronization diff-list related messages.

Error Message

```
%ISSU_CS_DL_MESSAGES-3-DL_CLI_DUMP: [chars][dec][chars][dec][chars]
```

Explanation This message provides statistics regarding a CLI dump of the ISSU configuration synchronization file.

Recommended Action No action is required.

Error Message

```
%ISSU_ERROR-2-CLIENT_INCOMPATIBLE: %s(%d): ISSU Client not compatible
```

Explanation ISSU Client incompatible.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISSU_ERROR-2-NEGO_NOT_DONE: %s(%d): ISSU Negotiation not complete
```

Explanation Unable to complete ISSU negotiation.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISSU_ERROR-2-NTI_EP_TYPE_REG: %s(%d): Failed to register EP type (%d) with NTI
: %s (%d)
```

Explanation Client could not register endpoint type with NTI.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISSU_ERROR-2-NTI_EP_TYPE_UNREG: %s(%d): Failed to unregister EP type (%d) with
NTI  : %s (%d)
```

Explanation   Client could not unregister endpoint type with NTI.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISSU_ERROR-2-NTI_REG: %s(%d): Failed to register with NTI  : %s (%d)
```

Explanation   Could not register client with NTI.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISSU_ERROR-2-NTI_UNREG: %s(%d): Failed to unregister with NTI  : %s (%d)
```

Explanation   Could not unregister client with NTI.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISSU_ERROR-3-CAPENTRY_REG: %s(%d): failed to register a capability entry (%s)
```

Explanation   The ISSU client failed to register a capability entry

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISSU_ERROR-3-CAPGROUP_REG: %s(%d): failed to register a capability group (%s)
```

Explanation   The ISSU client failed to register a capability 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/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISSU_ERROR-3-CAPTYPE_REG: %s(%d): failed to register capability type (%s)
```

Explanation   The ISSU client failed to register a capability type

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%ISSU_ERROR-3-CAP_EXCHANGE: %s(%d): Capability exchange failed with error (%s)`

Explanation The capability exchange failed, the ISSU clientis unable to process the received capability

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%ISSU_ERROR-3-CAP_REG: %s(%d): failed to register its capabilities (%s)`

Explanation The capabilities of the ISSU client could not be registered

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%ISSU_ERROR-3-CF_SEND: %s(%d): Client failed to send message (%d)`

Explanation ISSU client cannot send a negotiation message to a peer

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISSU_ERROR-3-CLIENT_REG: %s(%d): Client failed to register (%s)
```

Explanation The ISSU Client could not be registered

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISSU_ERROR-3-CLIENT_REG_FAILED: %s(%d): Client is not initialized
```

Explanation The ISSU Client is not yet initialized. The negotiation for this client is not yet done.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISSU_ERROR-3-ENTITY_REG: %s(%d): failed to register the entity (%s)
```

Explanation The ISSU entity could not be registered

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISSU_ERROR-3-ENTITY_UNREG: %s(%d): failed to unregister the entity (%s)
```

Explanation The ISSU entity could not be unregistered

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

will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

%ISSU_ERROR-3-ICC_SEND: %s(%d): Client failed to send message

Explanation   ISSU client cannot send a negotiation message to a peer

Recommended Action   Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

%ISSU_ERROR-3-MSGGROUP_REG: %s(%d): failed to register a message group (%s)

Explanation   The ISSU client failed to register a message 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/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

%ISSU_ERROR-3-MSGTYPE_REG: %s(%d): failed to register a message type (%s)

Explanation   The ISSU client failed to register a message type

Recommended Action   Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

`%ISSU_ERROR-3-MSG_MTU: %s(%d): Client failed to get mtu for message %d (%s)`

Explanation %s(%d): client cannot get the MTU for a message type

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%ISSU_ERROR-3-MSG_NOT_OK: %s(%d): ISSU message type (%d) is not compatible`

Explanation ISSU received a message not compatible with the running version.

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

Error Message

`%ISSU_ERROR-3-MSG_POLICY: %s(%d): Client failed to negotiate version for message type (%d), error (%s)`

Explanation ISSU client cannot negotiate message to a peer

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISSU_ERROR-3-MSG_REG: %s(%d): failed to register its messages (%s)
```

Explanation Messages for the ISSU client could not be registered

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISSU_ERROR-3-MTU_NOT_ENOUGH: %s(%d): Requested buffer size (%d) is greater than
the max MTU size (%d)
```

Explanation Checkpoint buffer size requested is greater than the max MTU size checkpoint supports

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISSU_ERROR-3-NEGO_PROCESS: %s(%d): Cannot create process: %s
```

Explanation The process to negotiate the session for the specified ISSU client cannot be created.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISSU_ERROR-3-REG_ARBITRATE_CALLBACK: %s(%d): Failed to register first speaker
arbitration callback - %s)
```

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

will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

%ISSU_ERROR-3-SESSION_REG: %s(%d): session failed toregister (%s)

Explanation The client's ISSU session could not be registered

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

%ISSU_ERROR-3-SESSION_UNREG: %s(%d): session (%d) failed to unregister (%s)

Explanation The client's ISSU session could not be unregistered

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

%ISSU_ERROR-3-START_NEGO_FAILED: %s(%d): failed to start negotiation (%s)

Explanation The ISSU client cannot start its negotiation

Recommended Action Copy the message exactly as it appears on the console or in the system log.
Research and attempt to resolve the issue using the tools and utilities provided at
http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities
will supply clarifying information. Also perform a search of the Bug Toolkit
http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case
with the Technical Assistance Center via the Internet
http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support
representative and provide the representative with the gathered information.

Error Message

```
%ISSU_ERROR-3-TRANSFORM_FAILED: %s(%d): %s transformation failed (%s)
```

Explanation   The transformation operation for the ISSU message has failed

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ISSU_ERROR-3-TRANSFORM_FAILED_DETAILED: %s(%d): %s transformation failed for
message %d, endpoint %d (%s)
```

Explanation   The transformation operation for the ISSU message has failed

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/cisco/web/support/index.html. With some messages, these tools and utilities will supply clarifying information. Also perform a search of the Bug Toolkit http://www.cisco.com/pcgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the gathered information.

ISSU_PROCESS Messages

Error Message

```
%ISSU_PROCESS-3-ABORTVERSION: issu loadversion; [chars]
```

Explanation   The **issu abortversion** command could not be processed because it can be only be entered while the system is in the LV or run version state.

Recommended Action   Restart the ISSU process.

Error Message

```
%ISSU_PROCESS-3-ACCEPTVERSION: issu acceptversion; [chars]
```

Explanation   The **issu acceptversion** command could not be processed because it did not fulfill the necessary criteria. This condition can occur because of one or more of the following reasons:

- –ISSU state in the active system is not run version.
- –The current version does not exist in the ROMMON of the active system.
- –The primary version does not exist in the ROMMON of the active system.

- –The primary version and run version are not the same because of an internal error.

- –The current version does not exist on the standby system.

- –The image names on the primary version and current version of the standby system are different.

- –The secondary version does not exist on the active system.

- –The active secondary version and standby current version are not the same.

Recommended Action Fix the error and retry the command.

Error Message

%ISSU_PROCESS-3-COMMITVERSION: issu commitversion; [chars]

- The **issu commitversion** command could not be processed because it did not fulfill the necessary criteria. This condition can occur because of one or more of the following reasons: –The current ISSU state is not the run version.

- –The secondary version does not exist on the standby system.

- –The boot variable for the standby system does not exist.

- –The new image is not the first in the boot sequence for the standby system.

- –The boot variable for the active system has not been set.

- –The primary version does not exist on the active system.

- –The new image is not the first in the boot sequence for the active system.

- –The new image is not the first in the boot sequence for the active system.

- –The value of the configuration register is not 0x2102.

Recommended Action Fix the error and retry the command.

Error Message

%ISSU_PROCESS-3-CONFIGREG: ISSU process is in progress; Changing configuration register might disrupt the upgrade process

Explanation An attempt was made to change the configuration register while the ISSU process was in progress. The configuration register value should not be changed while the ISSU process is in progress.

Recommended Action Ensure that the low order byte of the configuration register is set at 0x02 during the upgrade process.

Error Message

%ISSU_PROCESS-3-FILESYS: '[chars]' filesystem does not exist

Explanation An attempt to verify the file system has failed.

Recommended Action Download the file to the Flash memory disk.

Error Message

```
%ISSU_PROCESS-3-IMAGE: %s is loading the wrong image [ %s ], expected image [ %s ]
```

Explanation Wrong image is being loaded during ISSU process.

Recommended Action Check the detail state of ISSU process, make sure the right images are loaded on Active and on Standby

Error Message

```
%ISSU_PROCESS-3-IPC_AGENT: [chars] [ [chars] ]
```

Explanation The ISSU process IPC agent had an error.

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

Error Message

```
%ISSU_PROCESS-3-IPC_MSG: %s
```

Explanation The ISSU process IPC MSG Queue Setup encountered an error.

Recommended Action Copy the error and send it to TAC.

Error Message

```
%ISSU_PROCESS-3-LOADVERSION: [chars]
```

Explanation The **issu loadversion** command could not be processed because it did not fulfill the necessary criteria. This condition can occur because of one or more of the following reasons: –The standby system is not yet active.

Explanation –The ID of the active or standby unit is invalid.

Explanation –The ISSU process is not in the INIT state.

Explanation –The active or standby image does not exist in Flash memory.

Explanation –The image names are not the same.

Explanation –The value of the configuration register is not 0x2102.

Recommended Action Fix the error and retry the command.

Error Message

```
%ISSU_PROCESS-3-NVRAM: [chars]
```

Explanation NVRAM variables have not been set properly.

Recommended Action Ensure that the system variables have been properly set via ISSU or hardware module (hw-module) commands.

Error Message

```
%ISSU_PROCESS-3-PARAMETERS: [chars] ([chars]) parameters are wrong
```

Explanation The system could not be configured for ISSU.

Recommended Action Fix the error and retry the command.

Error Message

```
%ISSU_PROCESS-3-PEER: %s
```

Explanation The ISSU process cannot continue with negotiation as it can't verify the peer's state.

Recommended Action Make sure the peer is present and try again. If the problem persists, send the output of 'show issu state' and 'show version' to TAC.

Error Message

```
%ISSU_PROCESS-3-PRST: %s
```

Explanation Persistent variables are not set properly.

Recommended Action The issu commands or the hw-module command did not set the variables properly.

Error Message

```
%ISSU_PROCESS-3-RF: [chars] [ [chars] ]
```

Explanation The ISSU process RF client encountered an error.

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

Error Message

%ISSU_PROCESS-3-ROLLBACK_TIMER: [chars]

Explanation The rollback timer could not be configured.

Recommended Action Fix the error and retry the command.

Error Message

%ISSU_PROCESS-3-RUNVERSION: issu runversion; [chars]

Explanation The **issu runversion** command could not be processed because it did not fulfill the necessary criteria. This condition can occur because of one or more of the following reasons: –The standby system is not yet active.

Explanation –The ISSU is not the same as the load version.

Explanation –The primary version does not exist in the ROMMON of the active system.

Explanation –The value of the configuration register is not 0x2102.

Explanation –The ISSU state could not be set to the run version.

Recommended Action Fix the error and retry the command.

Error Message

%ISSU_PROCESS-3-SYSTEM: [chars]

Explanation The system could not be configured for ISSU.

Recommended Action Fix the error and retry the command. IVR Messages

Recommended Action The following are Interactive Voice Response (IVR) messages.

Error Message

%ISSU_PROCESS-3-TRANSFORM: [chars] [[chars]]

Explanation The ISSU process transform utility had an error.

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

Error Message

%ISSU_PROCESS-3-UAM: %s

Explanation Return code failure from calling UAM API.

Recommended Action Got unexpected rc from calling UAM API.

Error Message

%ISSU_PROCESS-4-ABORT_ISSU: %s

Explanation The peer has been determined to be incompatible and hence is being reloaded.

Recommended Action Send the output of 'show redundancy history' from the Active to TAC.

Error Message

%ISSU_PROCESS-7-DEBUG: [chars]

Explanation This message provides debug command information for the ISSU process.

Recommended Action No action is required.