



System Messages

System messages are saved in a log file or directed to other devices from the software running on the router. These messages are also known as “syslog” messages. System messages provide you with logging information for monitoring and troubleshooting purposes.

- [Information About Process Management, page 9-1](#)
- [How to Find Error Message Details, page 9-1](#)

Information About Process Management

You can access system messages by logging in to the console through Telnet protocol and monitoring your system components remotely from any workstation that supports the Telnet protocol.

Starting and monitoring software is referred to as process management. The process management infrastructure for the router is platform independent, and error messages are consistent across platforms running on Cisco IOS XE. You do not need to be directly involved in process management but we recommend that you read system messages that refer to process failures and other issues.

How to Find Error Message Details

To show further details about a process management / syslog error message enter the error message into the Error Message Decoder tool at:

http://www.cisco.com/en/US/support/tsd_most_requested_tools.html.

For example, enter the message “%PMAN-0-PROCESS_NOTIFICATION” into the tool to show an explanation of the error message and the recommended action to be taken.

Error Message %PMAN-0-PROCESS_NOTIFICATION : The process lifecycle notification component failed because [chars]

Explanation The process lifecycle notification component failed, preventing proper detection of a process start and stop. This problem is likely the result of a software defect in the software subpackage.

Recommended Action Note the time of the message and investigate the kernel error message logs to learn more about the problem and see if it is correctable. If the problem cannot be corrected or the logs are not helpful, copy the error message exactly as it appears on the console along with the output of the **show tech-support** command and provide the gathered information to a Cisco technical support representative.

Error Message %PMAN-0-PROCFAILCRIT A critical process [chars] has failed (rc [dec])

Explanation A process important to the functioning of the router has failed.

Recommended Action Note the time of the message and investigate the error message logs to learn more about the problem. 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 Search Tool at <http://www.cisco.com/cisco/psn/bssprt/bss>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create/>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message %PMAN-3-PROCFAILOPT An optional process [chars] has failed (rc [dec])

Explanation A process that does not affect the forwarding of traffic has failed.

Recommended Action Note the time of the message and investigate the kernel error message logs to learn more about the problem. Although traffic will still be forwarded after receiving this message, certain functions on the router may be disabled as a result of this message and the error should be investigated. If the logs are not helpful or indicate a problem you cannot correct, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at <http://www.cisco.com/tac>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Search Tool at <http://www.cisco.com/cisco/psn/bssprt/bss>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create/>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message %PMAN-3-PROCFAIL The process [chars] has failed (rc [dec])

Explanation The process has failed as the result of an error.

Recommended Action This message will appear with other messages related to the process. Check the other messages to determine the reason for the failures and see if corrective action can be taken. 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 Search Tool at <http://www.cisco.com/cisco/psn/bssprt/bss>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create/>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message %PMAN-3-PROCFAIL_IGNORE [chars] process exits and failures are being ignored due to debug settings. Normal router functionality will be affected. Critical router functions like RP switchover, router reload, FRU resets, etc. may not function properly.

Explanation A process failure is being ignored due to the user-configured debug settings.

Recommended Action If this behavior is desired and the debug settings are set according to the user's preference, no action is needed. If the appearance of this message is viewed as a problem, change the debug settings. The router is not expected to behave normally with this debug setting. Functionality like SSO switchover, router reloads, FRU resets, etc. will be affected. This setting should only be used in a debug scenario. It is not normal to run the router with this setting.

Error Message %PMAN-3-PROCHOLDDOWN The process [chars] has been helddown (rc [dec])

Explanation The process was restarted too many times with repeated failures and has been placed in the holddown state.

Recommended Action This message will appear with other messages related to the process. Check the other messages to determine the reason for the failures and see if corrective action can be taken. 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 Search Tool at <http://www.cisco.com/cisco/psn/bssprt/bss>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create/>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message %PMAN-3-RELOAD_RP_SB_NOT_READY : Reloading: [chars]

Explanation The RP is being reloaded since there is no ready standby instance.

Recommended Action Ensure that the reload is not due to an error condition.

Error Message %PMAN-3-RELOAD_RP : Reloading: [chars]

Explanation The RP is being reloaded.

Recommended Action Ensure that the reload is not due to an error condition. If it is due to an error condition, collect information requested by the other log messages.

Error Message %PMAN-3-RELOAD_SYSTEM : Reloading: [chars]

Explanation The system is being reloaded.

Recommended Action Ensure that the reload is not due to an error condition. If it is due to an error condition, collect information requested by the other log messages.

Error Message %PMAN-3-PROC_BAD_EXECUTABLE : Bad executable or permission problem with process [chars]

Explanation The executable file used for the process is bad or has permission problem.

Recommended Action Ensure that the named executable is replaced with correct executable.

Error Message %PMAN-3-PROC_BAD_COMMAND:Non-existent executable or bad library used for process <process name>

Explanation The executable file used for the process is missing or a dependent library is bad.

Recommended Action Ensure that the named executable is present and dependent libraries are good.

Error Message %PMAN-3-PROC_EMPTY_EXEC_FILE : Empty executable used for process [chars]

Explanation The executable file used for the process is empty.

Recommended Action Ensure that the named executable is of non-zero size.

Error Message %PMAN-5-EXITACTION : Process manager is exiting: [chars]

Explanation The process manager is exiting.

Recommended Action Ensure that the process manager exiting is not due to an error condition. If it is due to an error condition, collect information requested by the other log messages.

Error Message %PMAN-6-PROCSTART : The process [chars] has shutdown

Explanation The process has gracefully shutdown.

Recommended Action No user action is necessary. This message is provided for informational purposes only.

Error Message %PMAN-6-PROCSTATELESS : The process [chars] has started

Explanation The process has launched and is operating properly.

Recommended Action No user action is necessary. This message is provided for informational purposes only.

Error Message %PMAN-6-PROCSTATELESS : The process [chars] is restarting stateless

Explanation The process has requested a stateless restart.

Recommended Action No user action is necessary. This message is provided for informational purposes only.

