



Error and Event Messages

This appendix lists the CLI error and event messages.

How to Read System Messages

System messages begin with a percent (%) and are structured as follows: The text in bold are required elements of the system message, the text in *italics* are optional elements of the system message.

%FACILITY-SEVERITY-MNEMONIC: Message-text

FACILITY is a code consisting of two or more uppercase letters that indicate the facility to which the message refers. A facility can be a hardware device, a protocol, or a module of the system software. You can see a complete list of mainline facility codes for Cisco IOS Release 12.3 on Cisco.com. Go to this URL:

<http://www.cisco.com/univercd/cc/td/doc/product/software/ios123/123sup/123sems/123semv1/emgove r1.htm>

SEVERITY is a single-digit code from 0 to 7 that reflects the severity of the condition. The lower the number, the more serious the situation. [Table D-1](#) lists the severity levels.

Table D-1 Error Message Severity Levels

Level	Description
0 – emergency	System unusable
1 – alert	Immediate action needed
2 – critical	Critical condition
3 – error	Error condition
4 – warning	Warning condition
5 – notification	Normal but significant condition
6 – informational	Informational message only
7 – debugging	Appears during debugging only

MNEMONIC is a code that uniquely identifies the error message.

Variable information is indicated in brackets, for example [mac-address] indicates a the mac address of a device, [characters] indicates a character string, and [number] indicates a numeric value.

Message Traceback Reports

Some messages describe internal errors and contain traceback reports. This information is very important and should be included when you report a problem to your technical support representative.

The following sample message includes traceback information:

```
-Process= "Exec", level= 0, pid= 17  
-Traceback= 1A82 1AB4 6378 A072 1054 1860
```

Association Management Messages

Error Message DOT11-3-BADSTATE: [mac-address] [chars] [chars] -> [chars]

Explanation 802.11 Association and management uses a table-driven state machine to keep track and transition an Association through various states. A state transition occurs when an Association receives one of many possible events. When this error occurs, it means that an Association received an event that it did not expect while in this state.

Recommended Action The system can continue but may lose the Association that generates this error. Copy the message exactly as it appears and report it to your technical service representative.

Event Message DOT11-6-ASSOC: Interface [interface], Station [char] [mac], SSID [ssid], Authentication Type [auth_type], Key Management [key_mgmt] Associated

Explanation A station associated to an access point.

Recommended Action None.

Event Message DOT11-6-ADD: Interface [interface], Station [char] [mac] Associated to parent [char] [mac]

Explanation A station associated to an access point.

Recommended Action None.

Event Message DOT11-6-DISASSOC: Interface [interface], Deauthenticating Station [mac] [char], Reason [explanation], SSID [ssid].

Explanation A station disassociated from an access point.

Recommended Action None.

Error Message DOT11-6-ROAMED: Station [mac-address] Roamed to [mac-address]

Explanation The indicated station roamed to the indicated new access point.

Recommended Action None.

Error Message DOT11-4-ENCRYPT_MISMATCH: Possible encryption key mismatch between interface [interface] and station [mac-address]

Explanation The encryption setting of the indicated interface and indicated station may be mismatched.

Recommended Action Check the encryption configuration of this interface and the failing station to ensure that the configurations match.

802.11 Subsystem Messages

Event Message DOT11-6-FREQ_INUSE: Radio frequency [int] is in use

Explanation When scanning for an unused frequency, the unit recognized another radio using the displayed frequency.

Recommended Action None.

Event Message DOT11-6-FREQ_USED: Radio frequency [int] selected

Explanation After scanning for an unused frequency, the unit selected the displayed frequency.

Recommended Action None.

Error Message DOT11-4-NO_VALID_INFRA_SSID: No infrastructure SSID configured. [interface] not started

Explanation No infrastructure SSID was configured and the indicated interface was not started.

Recommended Action Add at least one infrastructure SSID to the radio configuration.

Error Message DOT11-4-VERSION_UPGRADE: Interface [interface], upgrading radio firmware

Explanation When starting the indicated interface, the access point found the wrong firmware version. The radio will be loaded with the required version.

Recommended Action None.

Error Message DOT11-2-VERSION_INVALID: Interface [interface], unable to find required radio version [hex].[hex] [number]

Explanation When trying to re-flash the radio firmware on the indicated interface, the access point recognized that the indicated radio firmware packaged with the Cisco IOS software had the incorrect version.

Recommended Action None.

Error Message DOT11-3-RADIO_OVER_TEMPERATURE: Interface [interface] Radio over temperature detected

Explanation The radio's internal temperature exceeds maximum limits on the indicated radio interface.

Recommended Action Take steps necessary to reduce the internal temperature. These steps will vary based on your specific installation.

Error Message DOT11-3-RADIO_TEMPERATURE_NORMAL: Interface [interface] radio temperature returned to normal

Explanation The radio's internal temperature has returned to normal limits on the indicated radio interface.

Recommended Action None.

Error Message DOT11-3-TX_PWR_OUT_OF_RANGE: Interface [interface] Radio transmit power out of range

Explanation The transmitter power level is outside the normal range on the indicated radio interface.

Recommended Action Remove unit from the network and service.

Error Message DOT11-3-RADIO_RF_LO: Interface [interface] Radio cannot lock RF freq

Explanation The radio phase lock loop (PLL) circuit is unable to lock the correct frequency on the indicated interface.

Recommended Action Remove unit from network and service.

Error Message DOT11-3-RADIO_IF_LO: Interface [interface] Radio cannot lock IF freq

Explanation The radio intermediate frequency (IF) PLL is unable to lock the correct frequency on the indicated interface.

Recommended Action Remove unit from network and service.

Error Message DOT11-6-FREQ_SCAN: Interface [interface] Scanning frequencies for [number] seconds

Explanation Starting a scan for a least congested frequency on the interface indicated for a the time period indicated.

Recommended Action None.

Error Message DOT11-2-NO_CHAN_AVAIL: Interface [interface], no channel available

Explanation No frequency is available, likely because RADAR has been detected within the previous 30 minutes.

Recommended Action None.

Error Message DOT11-6-DFS_SCAN_COMPLETE: DFS scan complete on frequency [frequency] MHz

Explanation The device has completed its Dynamic Frequency Scan (DFS) frequency scanning process on the displayed frequency.

Recommended Action None.

Error Message DOT11-6-DFS_SCAN_START: DFS: Scanning frequency [frequency] MHz for [number] seconds

Explanation The device has begun its DFS scanning process.

Recommended Action None.

Error Message DOT11-6-DFS_TRIGGERED: DFS: triggered on frequency [frequency] MHz

Explanation DFS has detected RADAR signals on the indicated frequency.

Recommended Action None. The channel will be placed on the non-occupancy list for 30 minutes and a new channel will be selected.

Error Message DOT11-4-DFS_STORE_FAIL: DFS: could not store the frequency statistics

Explanation A failure occurred writing the DFS statistics to flash.

Recommended Action None.

Error Message DOT11-4-NO_SSID: No SSIDs configured, [characters] not started

Explanation All SSIDs were deleted from the configuration. At least one must be configured for the radio to run.

Recommended Action Configure at least one SSID on the access point.

Error Message DOT11-4-NO_SSID_VLAN: No SSID with VLAN configured. [characters] not started

Explanation No SSID was configured for a VLAN. The indicated interface was not started.

Recommended Action At least one SSID must be configured per VLAN. Add at least one SSID for the VLAN on the indicated interface.

Error Message DOT11-4-NO_MBSSID_VLAN: No VLANs configured in MBSSID mode.
[characters] not started

Explanation No VLAN configured in MBSSID mode. The indicated interface was not started.

Recommended Action Add at least one SSID with the VLAN on the indicated interface configuration.

Error Message DOT11-4-NO_MBSSID_SHR_AUTH: More than 1 SSID with shared authentication method in non-MBSSID mode. %

Explanation Not more than one SSID can have shared authentication method when MBSSID is not enabled.

Recommended Action Remove SSID from Dot22Radio radio interface or change authentication mode for SSIC to open configuration.

Error Message DOT11-4-FW_LOAD_DELAYED: Interface [interface], network fileys not ready. Delaying firmware [characters] load

Explanation The network filesystem was not running or not ready when trying to flash new firmware into the indicated interface. Loading the identified firmware file has been delayed.

Recommended Action Make sure the network is up and ready before attempting to reflash the new firmware.

Error Message DOT11-2-FLASH_UNKNOWN_RADIO: Interface [interface] has an unknown radio

Explanation The radio type could not be determined when the user attempted to flash new firmware into the indicated interface.

Recommended Action Reboot the system and see if the firmware upgrade completes.

Error Message DOT11-4-UPLINK_ESTABLISHED: Interface [interface] associated to AP
[characters] [characters] [characters]

Explanation The indicated repeater has associated to the indicated root access point. Clients can now associate to the indicated repeater and traffic can pass.

Recommended Action None.

Error Message DOT11-2-UPLINK_FAILED: Uplink to parent failed: [characters]

Explanation The connection to the parent access point failed for the displayed reason. The uplink will stop its connection attempts.

Recommended Action Try resetting the uplink interface. Contact Technical Support if the problem persists.

Error Message DOT11-4-CANT_ASSOC: Interface [interface], cannot associate [characters]

Explanation The indicated interface device could not associate to an indicated parent access point.

Recommended Action Check the configuration of the parent access point and this unit to make sure there is a match.

Error Message DOT11-2-PROCESS_INITIALIZATION_FAILED: The background process for the radio could not be started: [characters]

Explanation The initialization process used by the indicated interface failed for some reason, possibly a transient error.

Recommended Action Perform a reload of the access point. If this fails to rectify the problem, perform a power cycle. If this still fails, try downgrading the access point firmware to the previous version.

Error Message DOT11-2-RADIO_HW_RESET: Radio subsystem is undergoing hardware reset to recover from problem

Explanation An unrecoverable error occurred that could not be resolved by a soft reset.

Recommended Action None.

Error Message DOT11-4-MAXRETRIES: Packet to client [chars] [mac] reached max retries [int], remove the client

Explanation A packet sent to the client has not been successfully delivered many times, and the max retries limit has been reached. The client is deleted from the association table.

Recommended Action Force re authentication from the client to reassociate to the router.

Error Message DOT11-4-RM_INCAPABLE: Interface [interface]

Explanation Indicated interface does not support the radio management feature.

Recommended Action None.

Error Message DOT11-4-RM_INCORRECT_INTERFACE: Invalid interface, either not existing or non-radio

Explanation A radio management request discovered that the interface either does not exist or is not a radio interface.

Recommended Action None.

Error Message DOT11-3-POWERS_INVALID: Interface [interface], no valid power levels available

Explanation The radio driver found no valid power level settings.

Recommended Action Investigate and correct the power source and settings.

Error Message DOT11-4-RADIO_INVALID_FREQ: Operating frequency [frequency] invalid - performing a channel scan

Explanation The indicated frequency is invalid for operation. A channel scan is being performed to select a valid frequency.

Recommended Action None.

Error Message DOT11-2-RADIO_INITIALIZATION_ERROR: The radio subsystem could not be initialized [characters]

Explanation A critical error was detected while attempting to initialize the radio subsystem.

Recommended Action Reload the system.

Error Message DOT11-4-UPLINK_NO_ID_PWD: Interface [interface], no username/password supplied for uplink authentication

Explanation The user failed to enter a username and/or password.

Recommended Action Enter the username and/or password and try again.

Error Message DOT11-4-NO_IE_CFG: No IEs configured for [characters] [ssid index]

Explanation When attempting to apply a beacon or probe response to the radio, the beacon or probe was undefined on the indicated SSID index.

Recommended Action Check the IE configuration.

Error Message DOT11-4-FLASHING_RADIO: Interface [interface], flashing radio firmware [characters]

Explanation The indicated interface radio has been stopped to load the indicated new firmware.

Recommended Action None.

Error Message DOT11-4-LOADING_RADIO: Interface [interface], loading the radio firmware [characters]

Explanation The indicated interface radio has been stopped to load new indicated firmware.

Recommended Action None.

Error Message DOT11-2-NO_FIRMWARE: Interface [interface], no radio firmware file [characters] was found."

Explanation When trying to flash new firmware, the file for the radio was not found in the Flash file system.

Recommended Action The wrong image has been loaded into the unit. Locate the correct image based on the type of radio used.

Error Message DOT11-2-BAD_FIRMWARE: Interface [interface], radio firmware file [characters] is invalid."

Explanation When trying to Flash new firmware into the indicated interface the indicated radio firmware file was found to be invalid.

Recommended Action Make sure the correct firmware image file is located in the place where the unit expects to find it.

Error Message DOT11-2-RADIO_FAILED: Interface [interface] failed - [chars]

Explanation The radio driver found a severe error and is shutting down.

Recommended Action Shut/no shut the interface. If that fails, reboot router.

Error Message DOT11-4-FLASH_RADIO_DONE: Interface [interface], flashing radio firmware completed

Explanation The indicated interface radio firmware flash is complete, and the radio will be restarted with the new firmware.

Recommended Action None.

Error Message DOT11-4-UPLINK_DOWN: Interface [interface], parent lost: [characters]

Explanation The connection to the parent access point on the indicated interface was lost for the reason indicated. The unit will try to find a new parent access point.

Recommended Action None.

Error Message DOT11-4-CANT_ASSOC: Cannot associate: [characters]

Explanation The unit could not establish a connection to a parent access point for the displayed reason.

Recommended Action Verify that the basic configuration settings (SSID, WEP, and others) of the parent access point and this unit match.

Error Message DOT11-4-BRIDGE_LOOP: Bridge loop detected between WGB [mac-address] and device [mac-address]

Explanation The indicated workgroup bridge reported the address of one of its indicated Ethernet clients and the access point already had that address marked as being somewhere else on the network.

Recommended Action Click **Refresh** on the Associations page on the access point GUI, or enter the clear **dot11 statistics** command on the CLI.

Error Message DOT11-4-ANTENNA_INVALID: Interface [interface], current antenna position not supported, radio disabled

Explanation The Indicated AIR-RM21A radio module does not support the high-gain position for the external antenna (the high-gain position is folded flat against the access point). The access point automatically disables the radio when the antenna is in the high-gain position.

Recommended Action Fold the antenna on the AIR-RM21A radio module so that it is oriented 90 degrees to the body of the access point.

Error Message DOT11-3-RF_LOOPBACK_FAILURE: Interface [interface] Radio failed to pass RF loopback test

Explanation Radio loopback test failed for the interface indicated.

Recommended Action None.

Error Message DOT11-3-RF_LOOPBACK__FREQ_FAILURE: Interface [interface] failed to pass RF loopback test

Explanation Radio loopback test failed at a given frequency for the indicated interface.

Recommended Action None.

Error Message DOT11-7-AUTH_FAILED: Station [mac-address] Authentication failed

Explanation The indicated station failed authentication.

Recommended Action Verify that the user entered the correct username and password, and verify that the authentication server is online.

Error Message DOT11-4-TKIP_MIC_FAILURE: Received TKIP Michael MIC failure report from the station [mac-address] on the packet (TSC=0x%11x) encrypted and protected by [key] key."

Explanation TKIP Michael MIC failure was detected from the indicated station on a unicast frame decrypted locally with the indicated pairwise key.

Recommended Action A failure of the Michael MIC in a packet usually indicates an active attack on your network. Search for and remove potential rogue devices from your wireless LAN.

Error Message DOT11-4-TKIP_MIC_FAILURE_REPORT: Received TKIP Michael MIC failure report from the station [mac-address] on the packet (TSC=0x0) encrypted and protected by [key] key

Explanation The access point received an EAPOL-key from the indicated station notifying the access point that TKIP Michael MIC failed on a packet transmitted by this access point.

Recommended Action None.

Error Message DOT11-3-TKIP_MIC_FAILURE_REPEATED: Two TKIP Michael MIC failures were detected within [number] seconds on [interface] interface. The interface will be put on MIC failure hold state for next [number] seconds

Explanation Two TKIP Michael MIC failures were detected within the indicated time on the indicated interface. Because this usually indicates an active attack on your network, the interface will be put on hold for the indicated time. During this hold time, stations using TKIP ciphers are disassociated and cannot reassociate until the hold time ends. At the end of the hold time, the interface operates normally.

Recommended Action MIC failures usually indicate an active attack on your network. Search for and remove potential rogue devices from your wireless LAN. If this is a false alarm and the interface should not be on hold this long, use the **countermeasure tkip hold-time** command to adjust the hold time.

Error Message SOAP-3-WGB_CLIENT_VLAN: Workgroup Bridge Ethernet client VLAN not configured

Explanation No VLAN is configured for client devices attached to the workgroup bridge.

Recommended Action Configure a VLAN to accommodate client devices attached to the workgroup bridge.

Error Message SOAP-3-ERROR: Reported on line [number] in file [characters].[characters]

Explanation An internal error occurred on the indicated line number in the indicated filename in the controller ASIC.

Recommended Action None

Error Message IF-4-MISPLACED_VLAN_TAG: Detected a misplaced VLAN tag on source [interface]. Dropping packet

Explanation Received an 802.1Q VLAN tag which could not be parsed correctly. The received packet was encapsulated or de encapsulated incorrectly.

Recommended Action

Local Authenticator Messages

Error Message RADSRV-4-NAS_UNKNOWN: Unknown authenticator: [ip-address]

Explanation The local RADIUS server received an authentication request but does not recognize the IP address of the network access server (NAS) that forwarded the request.

Recommended Action Make sure that every access point on your wireless LAN is configured as a NAS on your local RADIUS server.

Error Message RADSRV-4-NAS_KEYMIS: NAS shared key mismatch.

Explanation The local RADIUS server received an authentication request but the message signature indicates that the shared key text does not match.

Recommended Action Correct the shared key configuration on either the NAS or on the local RADIUS server.

Error Message RADSRV-4-BLOCKED: Client blocked due to repeated failed authentications

Explanation A user failed authentication the number of times configured to trigger a block, and the account been disabled.

Recommended Action Use the **clear radius local-server user *username*** privileged EXEC command to unblock the user, or allow the block on the user to expire by the configured lockout time.