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:


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

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.
802.11 Subsystem Messages

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 filesys 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.


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.