

# **Error and Event Messages**

This appendix lists the CLI error and event messages.

# **Conventions**

System error messages are displayed in the format shown in Table C-1.

Table C-1 System Error Message Format

Message Component	Description	Example
Error identifier	A string categorizing the error.	STATION-ROLE
Software component	A string identifying the software component of the error.	AUTO_INSTALL
Severity Level	A numerical string indicating the severity of the error.	0-LOG-EMERG—emergency situation, nothing is functional
		1-LOG-ALERT—alerts user to a very serious problem
		2-LOG-CRIT—warns of a possible serious critical error 3-LOG-ERR—warning of error condition, most features functional; user should exercise care
		4-LOG-WARNING—warning that user can ignore if they prefer
		5-LOG-NOTICE—notice that may be of concern to user
		6-LOG-INFO—informational (not serious)
		7-LOG-DEBUG—debug information (not serious)
Action Flags	Internal to the code for which additional action is displayed.	0—No action flag MSG-TRACEBACK—includes traceback with message MSG-PROCESS—includes process information with message MSG-CLEAR—indicates condition had cleared MSG-SECURITY—indicates as security message MSG-NOSCAN—suppresses EEM pattern screening
%d	An integer number.	2450
%e	A MAC address.	000b.fcff.b04e
%s	A message string which provides more detail of the error.	"Attempt to protect port 1640 failed."
%x	A hexadecimal number.	0x001

# **Software Auto Upgrade Messages**

**Error Message** SW-AUTO-UPGRADE-2-FATAL\_FAILURE: "Attempt to upgrade software failed, software on flash may be deleted. Please copy software into flash.

**Explanation** Auto upgrade of the software failed. The software on the flash might have been deleted. Copy software into the flash.

Recommended Action Copy software before rebooting the unit.

Error Message SW-AUTO-UPGRADE-7-DHCP\_CLIENT\_FAILURE: "%s": Auto upgrade of the
software failed."

**Explanation** Auto upgrade of the software failed.

**Recommended Action** Make sure that the DHCP client is running.

**Error Message** SW-AUTO-UPGRADE-7-DHCP\_SERVER\_FAILURE: "%s": Auto upgrade of the software failed."

**Explanation** Auto upgrade of the software failed.

**Recommended Action** Make sure that the DHCP server is configured correctly.

Error Message SW-AUTO-UPGRADE-7\_BOOT\_FAILURE: "%s": Auto upgrade of the software
failed."

**Explanation** Auto upgrade of the software failed.

**Recommended Action** Reboot the unit. If the message appears again, copy the error message exactly as it appears and report it to your technical support representative.

**Error Message** DOT11-4-UPGRADE: "Send your company name and the following report to migrateapj52w52@cisco.com." The following AP has been migrated from J(j52) to U(w52) Regulatory Domain:AP name AP Model Ethernet MAC %s %s %e \U\Regulatory Domain

**Explanation** A Japan regulatory domain field upgrade from J to U has been accomplished.

Recommended Action None.

**Error Message** AUTO-INSTALL-4-STATION\_ROLE: "%s": The radio is operating in automatic install mode."

**Explanation** The radio is operating in automatic install mode.

**Recommended Action** Use the **station-role** configuration interface command to configure the radio for a role other than install mode.

**Error Message** AUTO-INSTALL-4-IP\_ADDRESS\_DHCP: "The radio is operating in automatic install mode and has set ip address dhcp."

**Explanation** The radio is operating in automatic install mode and is configured to receive an IP address through DHCP.

**Recommended Action** Use the **station-role** configuration interface command to configure the radio for a role other than install mode.

**Error Message** AUTO-INSTALL-6\_STATUS: "%s" %s. RSSI=-%d dBm.: "The radio is operating in install mode."

**Explanation** The radio is operating in automatic install mode.

**Recommended Action** Use the **station-role** configuration interface command to configure the radio for a role other than install mode.

**Error Message** AVR\_IMAGE\_UPDATE-7-UPDATE\_COMPLETE: "The AVR "\$d" firmware was successfully updated."

**Explanation** The access point AVR firmware was successfully updated.

Recommended Action None.

**Error Message** AVR\_IMAGE\_UPDATE-2-UPDATE\_FAILURE: "The AVR "\$d" firmware is not current. Update error: "\$s"."

**Explanation** The AVR firmware is not current and the update failed

**Recommended Action** Copy the error message and report it to your technical support representative.

Error Message AVR\_IMAGE\_UPDATE-4-UPDATE\_SKIPPED: "AVR "\$d" update processing was skipped:"\$s"."

**Explanation** AVR update processing was skipped due to an error.

Recommended Action None.

Error Message AVR\_IMAGE\_UPDATE-4-UPDATE\_START: "The system is updating the AVR "\$d"
firmware. Please wait . . . "

**Explanation** The system is updating the AVR firmware.

#### **Association Management Messages**

Error Message DOT11-3-BADSTATE: "%s %s ->%s."

**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.

Error Message DOT11-6-ASSOC: "Interface %s, Station %s e% %s KEY\_MGMT (%s),
MSGDEF\_LIMIT\_MEDIUM."

**Explanation** The indicated station associated to an access point on the indicated interface.

Recommended Action None.

Error Message DOT11-6-ADD: "Interface %s, Station %e associated to parent %e."

**Explanation** The indicated station associated to the parent access point on the indicated interface.

Recommended Action None.

Error Message DOT11-6-DISASSOC: Interface %s, Deauthenticating Station %e #s

**Explanation** Station disassociated from the access point.

Recommended Action None.

Error Message DOT11-6-ROAMED: "Station %e roamed to %e."

**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 %s and station %e."

**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.

**Error Message** DOT11-4-DIVER\_USED: Interface \$s, Mcs rates 8-15 disabled due to only one transmit or recieve antenna enabled

**Explanation** These rates require that at least 2 receive and transmit antennas be enabled.

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/cgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet 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 gathered information.

Error Message DOT11-4-NO\_HT: Interface %s, Mcs rates disabled on vlan %d due to %s

**Explanation** The correct configuration was not in use to allow the HT rates to be used.

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/cgi-bin/Support/Bugtool/home.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet 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 gathered information.

Error Message DOT11-4-NO\_MBSSID\_BACKUP\_VLAN: Backup VLANs cannot be configured if
MBSSID is not enabled:"\$s" not started

**Explanation** To enable backup VLAN, MBSSID mode should be configured.

**Recommended Action** Configure MBSSID on the device.

# **Unzip Messages**

 $\textbf{Error Message} \ \, \texttt{SOAP-4-UNZIP\_OVERFLOW:} \ \, \texttt{``Failed to unzip \$s, exceeds maximum uncompressed html size.''}$ 

**Explanation** The HTTP server cannot retrieve a compressed file in response to an HTTP GET request because the file is too large for the buffers used in the uncompression process.

**Recommended Action** Make sure that the file is a valid HTML page. If it is, you need to copy an uncompressed version of the file into Flash to retrieve it through HTTP.

#### **System Log Messages**

Error Message %DOT11-4-LOADING\_RADIO: Interface [chars], loading the radio firmware
([chars])

**Explanation** The radio has been stopped to load new firmware.

Recommended Action None.

Error Message %LINEPROTO-5-UPDOWN: Line protocol on Interface [chars], changed state
to [chars]

**Explanation** The data link level line protocol has changed state.

Recommended Action None.

Error Message %SYS-5-RESTART: System restarted --[chars]

**Explanation** A reload or restart was requested.

Recommended Action Notification message only. None.

Error Message %SYS-5-CONFIG\_I: Configured from [chars] by [chars]

**Explanation** The router configuration has been changed.

**Recommended Action** This is a notification message only. None.

Error Message %LINEPROTO-5-UPDOWN: Line protocol on Interface [chars], changed state
to [chars]

**Explanation** The data link level line protocol has changed state on the interface shown.

Recommended Action None.

Error Message %SNMP-5-COLDSTART: SNMP agent on host [chars] is undergoing a cold start

**Explanation** The SNMP server completed a coldstart.

Recommended Action Notification message only. None.

**Error Message** %SYS-6-CLOCKUPDATE: System clock has been updated from [chars] to [chars], configured from [chars] by [chars].

**Explanation** The system clock has been modified.

**Recommended Action** This is an informational message only. None.

#### **802.11 Subsystem Messages**

Error Message DOT11-6-FREQ\_USED: "Interface %s, frequency %d selected."

**Explanation** After scanning for an unused frequency, the indicated interface selected the displayed frequency.

Recommended Action None.

**Error Message** DOT11-4-NO-VALID\_INFRA\_SSID: "No infrastructure SSID configured. %s 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 %d, 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 %d, unable to find required radio
version %x.%x/ %d/

**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 %s 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 DOT11-6-RADIO\_TEMPERATURE\_NORMAL: "Interface %s radio temperature
returned to normal."

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

Error Message DOT11-3-TX\_PWR\_OUT\_OF\_RANGE: "Interface %s 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 %s 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 %s 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 %s Scanning frequencies for %d 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 %s, 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-CHAN\_NOT\_AVAIL: "DFS configured frequency %d Mhz unavailable
for %d minute(s).

**Explanation** Radar has been detected on the current channel. Dynamic Frequency Selection (DFS) regulations require no transmission for 30 seconds on the channel.

Recommended Action None.

Error Message DOT11-6-DFS SCAN COMPLETE: "DFS scan complete on frequency %d MHz."

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

Error Message DOT11-6-DFS\_SCAN\_START: "DFS: Scanning frequency %d MHz for %d
seconds."

**Explanation** The device has begun its DFS scanning process.

Recommended Action None.

Error Message DOT11-6-DFS\_TRIGGERED: "DFS: triggered on frequency %d 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, %d 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. %s 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. %s 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 \$ is down".

**Explanation** Not more than 1 SSID can have shared authentication method when MBSSID is not enabled.

**Recommended Action** Remove Dot11Radio radio interface or change authentication mode for SSID to open configuration.

**Error Message** DOT114-NO\_MBSSID\_BACKUP\_VLAN: "Backup VLANs cannot be configured if MBSSID is not enabled. %s not started.

**Explanation** To enable a backup VLAN, MBSSID mode should be configured.

**Recommended Action** Configure MBSSID on the device.

**Error Message** IF-4-MISPLACED\_VLAN\_TAG: "Detected a misplaced VLAN tag on source Interface %. Dropping packet.

**Explanation** Received an 802.1Q VLAN tag was detected on the indicated interface which could not be parsed correctly. The received packet was encapsulated or deencapsulated incorrectly.

Recommended Action None.

 $\label{local_energy} \textbf{Error Message} \ \ \texttt{DOT11-2-FW\_LOAD\_NET:} \ \ \texttt{``Interface \$s cannot load on boot. Place image in flash root directory and reload."}$ 

**Explanation** The radio images cannot be loaded from a network when the access point boots.

**Recommended Action** Place the image on the root directory of the flash file system.

Error Message DOT11-4-FW\_LOAD\_DELAYED: "Interface %s, network filesys not ready.
Delaying firmware (%s) 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 DOT11-3-FLASH\_UNKNOWN\_RADIO: "Interface %s 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 %s associated to AP %s %e %s.

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

Error Message DOT11-2-UPLINK FAILED: "Uplink to parent failed: %s."

**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 %, cannot associate %s."

**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 DOT11-4-CANT\_ASSOC: "Interface Dot11Radio 0, cannot associate."

**Explanation** Parent does not support client MFP. This error message displays on the access point only in workgroup bridge, repeater, or non-root bridge mode and is seen if the WGB, repeater, or non-root is configured with Client MFP SD required (or mandatory) but root Client MFP is disabled.

**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: %s)

**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 DOT11-2-RESET\_RADIO: "Interface %s, Radio %s, Trying hardware reset on
radio."

**Explanation** Using a software reset to start a radio failed. Trying a hardware reset which will reset all radios on the unit.

**Error Message** DOT11-4-MAXRETRIES: "Packet to client %e reached max retries, removing the client."

**Explanation** The maximum packet send retry limit has been reached and the client is being removed. This error message indicates that the access point attempts to poll the client a certain number of times, but does not receive a response. Therefore, the client is removed from the association table. This issue is commonly seen when the client and access point are attempting to communicate in a noisy RF environment.

**Recommended Action** To resolve this issue, see if a snapshot reveals noise in the radio spectrum by trying to run a carrier busy test on the access point. Attempt to alleviate any unwanted noise. For more information, see the "Performing a Carrier Busy Test" procedure on page 6-40. If there are several access points in the same area, they could be overlapping the channel signal or with any other wireless device in the surrounding area. Change the channels under Network Interfaces and select Radio-802.11. There are three non-overlapping channels: 1, 6, and 11.

Error Message DOT11-4-RM\_INCAPABLE: "Interface %s

**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.

**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 (%d) invalid performing a channel scan."

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

**Error Message** DOT11-4-RADIO\_NO\_FREQ: "Interface &s, all frequencies have been blocked, interface not started."

**Explanation** The frequencies set for operation are invalid and a channel scan is being forced in order to select a valid operating frequency.

Recommended Action None.

**Error Message** DOT11-4-BCN\_BURST\_NO\_MBSSID: "Beacon burst mode is enabled but MBSSID is not enabled, %s is down."

**Explanation** Beacon burst mode can only be enabled when MBSSID is enabled on the indicated interface.

Recommended Action Enable the MBSSID or disable beacon bursting on the indicated interface.

**Error Message** DOT11-4-BCN\_BURST\_TOO\_MANY\_DTIMS: "Beacon burst mode is enabled and there are too many different DTIM periods defined. %s is down.

**Explanation** Beacon burst mode can only support up to 4 unique DTIM values, each with a maximum of 4 BSSes.

**Recommended Action** Change the number of unique DTIMs on the SSIDs configured for the interface to a more reasonable set of values.

**Error Message** DOT11-2-RADIO\_INITIALIZATION\_ERROR: "The radio subsystem could not be initialized (%s)."

**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 %s, 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 DOT11-5-NO\_IE\_CFG: "No IEs configured for %s (ssid index %u)."

**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 %s, flashing radio firmware (%s)."

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

Recommended Action None.

**Error Message** DOT11-4-LOADING\_RADIO: "Interface %s, loading the radio firmware (%s)."

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

Recommended Action None.

Error Message DOT11-2-NO\_FIRMWARE: "Interface %s, no radio firmware file (%s) was
found."

**Explanation** When trying to flash new firmware, the file for the radio was not found in the Flash file system. Or, the IOS on the access point is corrupt.

**Recommended Action** The wrong image has been loaded into the unit. Locate the correct image based on the type of radio used. To resolve this issue you may have to reload the access point with a new Cisco IOS image. Instructions for reloading an image are found in "Reloading the Access Point Image" section on page 26-7.

If the IOS on the access point is corrupt, reload the access point image using the Mode button method. Refer to the "Using the MODE Button" section on page 26-5.

Error Message DOT11-2-BAD\_FIRMWARE: "Interface %s, radio firmware file (%s) 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 %s, failed - %s."

**Explanation** The radio driver on the indicated interface found a severe error and is shutting down for the indicated reason.

Recommended Action None.

Error Message DOT11-4-FLASH\_RADIO\_DONE: "Interface %s, flashing radio firmware
completed."

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

Error Message DOT11-4-UPLINK LINK DOWN: "Interface %s, parent lost: %s."

**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: \$s

**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-CLIENT\_NOT\_FOUND: "Client was not found."

**Explanation** Client was not found while checking mic.

Recommended Action None.

**Error Message** DOT11-4-MAXRETRIES: Packet to client [mac] reached max retries, 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 None.

**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 %s, 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** DOT11-6-ANTENNA\_GAIN: "Interface %s, antenna position/gain changed, adjusting transmitter power."

**Explanation** The antenna gain has changed so the list of allowed power levels must be adjusted.

Recommended Action None.

Error Message DOT11-4-DIVER\_USED: "Interface %s Mcs rates 8-15 disabled due to only
one transmit or receive antenna enabled."

**Explanation** The rates listed require at least 2 receive or transmit antennas be enabled.

**Recommended Action** Install and enable at least 2 receive or transmit antennas on the access point.

Error Message DOT11-3-RF-LOOPBACK\_FAILURE: "Interface %s 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 %s 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 %e 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 DOT11-7-CCKM\_AUTH\_FAILED: "Station %e CCKM authentication failed."

**Explanation** The indicated station failed CCKM authentication.

**Recommended Action** Verify that the topology of the access points configured to use the WDS access point is functional.

Error Message DOT11-4-CCMP\_REPLAY: "AES-CCMP TSC replay was detected on packet (TSC 0x%11x received from &e)."

**Explanation** AES-CCMP TSC replay was indicated on a frame. A replay of the AES-CCMP TSC in a received packet almost indicates an active attack.

Error Message DOT11-4-CKIP\_MIC\_FAILURE: "CKIP MIC failure was detected on a packet
(Digest 0x%x) received from %e)."

**Explanation** CKIP MIC failure was detected on a frame. A failure of the CKIP MIC in a received packet almost indicates an active attack.

Recommended Action None.

Error Message DOT11-4-CKIP\_REPLAY: "CKIP SEQ replay was detected on a packet (SEQ
0x&x) received from %e."

**Explanation** CKIP SEQ replay was detected on a frame. A replay of the CKIP SEQ in a received packet almost indicates an active attack."

Recommended Action None.

Error Message DOT11-4-TKIP\_MIC\_FAILURE: "Received TKIP Michael MIC failure report
from the station %e on the packet (TSC=0x%11x) encrypted and protected by %s 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 received packet might indicate an active attack on your network. Search for and remove potential rogue devices from your wireless LAN. This failure might also indicate a misconfigured client or a faulty client.

Error Message DOT11-4-TKIP\_MIC\_FAILURE\_REPORT: "Received TKIP Michael MIC failure report from the station %e on the packet (TSC=0x0) encrypted and protected by %s 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 %s seconds on %s interface. The interface will be put on MIC failure hold state for next %d 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 DOT11-4-TKIP\_REPLAY: "TKIP TSC replay was detected on a packet (TSC
0x%ssx received from %e)."

**Explanation** TKIP TSC replay was detected on a frame. A replay of the TKIP TSC in a received packet almost indicates an active attack.

Recommended Action None.

**Error Message** DOT11-4-WLAN\_RESOURCE\_LIMIT: "WLAN limit exceeded on interface %s and network-id %d."

**Explanation** This access point has reached its limit of 16 VLANs or WLANs.

**Recommended Action** Unconfigure or reduce static VLANS if access point is trying to associate with RADIUS assigned Network-ID turned on.

**Error Message** SOAP-3-WGB\_CLIENT\_VLAN\_SOAP: "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 DOT11-4-NO\_VLAN\_NAME: "VLAN name %s from RADIUS server is not configured for station %e."

**Explanation** The VLAN name returned by the RADIUS server must be configured in the access point.

**Recommended Action** Configure the VLAN name in the access point.

Error Message DOT11-4-NO\_VLAN\_ID: "VLAN id %d from Radius server is not configured
for station %e."

**Explanation** The VLAN ID returned by the Radius server must be configured on the access point.

Recommended Action Configure the VLAN ID on the access point.

Error Message SOAP-3-ERROR: "Reported on line %d in file %s.%s."

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

Error Message SOAP FIPS-2-INIT FAILURE: "SOAP FIPS initialization failure: %s."

**Explanation** SOAP FIPS initialization failure.

Recommended Action None.

Error Message SOAP\_FIPS-4-PROC\_FAILURE: "SOAP FIPS test failure: %s."

**Explanation** SOAP FIPS test critical failure.

Recommended Action None.

Error Message SOAP\_FIPS-4-PROC\_WARNING: "SOAP FIPS test warning: %s."

**Explanation** SOAP FIPS test non-critical failure.

Recommended Action None.

Error Message SOAP\_FIPS-2-SELF\_TEST\_IOS\_FAILURE: "IOS crypto FIPS self test failed
at %s."

**Explanation** SOAP FIPS self test on IOS crypto routine failed.

Recommended Action Check IOS image.

Error Message SOAP\_FIPS-2-SELF\_TEST\_RAD\_FAILURE: "RADIO crypto FIPS self test failed
at %s on interface %s %d."

**Explanation** SOAP FIPS self test on radio crypto routine failed.

**Recommended Action** Check radio image.

Error Message SOAP\_FIPS-2-SELF\_TEST\_IOS\_SUCCESS: "IOS crypto FIPS self test passed."

**Explanation** SOAP FIPS self test passed.

Recommended Action None.

Error Message SOAP\_FIPS-2-SELF\_TEST\_RAD\_SUCCESS: "RADIO crypto FIPS self test passed
on interface %s %d."

**Explanation** SOAP FIPS self test passed on a radio interface.

Error Message DOT11-6-MCAST\_DISCARD: "%s mode multicast packets are discarded in %s
multicast mode."

**Explanation** The access point configured as a workgroup bridge and drops infrastructure mode multicast packets in client mode and drops client mode multicast packets in infrastructure mode.

Recommended Action None.

#### **Inter-Access Point Protocol Messages**

Error Message DOT11-6-STANDBY\_ACTIVE: "Standby to Active, Reason = %s (%d)."

**Explanation** The access point is transitioning from standby mode to active mode for the indicated reason.

Recommended Action None.

Error Message DOT11-6-STANDBY\_REQUEST: "Hot Standby request to shutdown radios from
%e."

**Explanation** The indicated standby access point has requested that this access point shut down its radio interfaces because a failure has been detected on one of this access point's radio interfaces.

Recommended Action None.

Error Message DOT11-6-ROGUE AP: "Roque AP %e reported. Reason: %s."

**Explanation** A station has reported a potential rogue access point for the indicated reason.

Recommended Action None.

# **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.

 ${\bf Error\; Message}$  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.

#### **Error Message**

Error Message DOT1X-SHIM-6-AUTH OK: "Interface %s authenticated [%s]."

**Explanation** The 802.1x authentication was successful.

**Recommended Action** None.

Error Message DOT1X-SHIM-3-AUTH FAIL: "Interface %s authentication failed."

**Explanation** The 802.1x authentication failed to the attached device.

**Recommended Action** Check the configuration of the 802.1x credentials on the client as well as the RADIUS server.

Error Message DOT1X-SHIM-3-INIT\_FAIL: "Unable to init - %s."

**Explanation** An error occurred during the initialization of the shim layer.

**Recommended Action** 

Error Message DOT1X-SHIM-3-UNSUPPORTED KM: "Unsupported key management: %X."

**Explanation** Am error occurred during the initialization of the shim layer. An unsupported key management type was found.

Error Message DPT1X-SHIM-4-PLUMB KEY ERR: "Unable to plumb keys - %s."

**Explanation** An unexpected error occurred when the shim layer tried to plumb the keys.

Recommended Action None.

Error Message DOT1X-SHIM-3-PKT\_TX\_ERR: "Unable to tx packet -%s."

**Explanation** An unexpected error occurred when the shim layer tried to transmit the dot1x packet.

Recommended Action None.

Error Message DOT1X-SHIM-3-ENCAP\_ERR: "Packet encap failed for %e."

**Explanation** An unexpected error occurred when the shim layer tried to transmit the dot1x packet. The packet encapsulation failed.

Recommended Action None.

Error Message DOT1X-SHIM-3-SUPP START FAIL: "Unable to start supplicant on %s."

**Explanation** An unexpected error occurred when the shim layer tried to start the dot1x suppliant on the indicated interface.

Recommended Action None.

Error Message DOT1X-SHIM=3-NO\_UPLINK: "No uplink found for %s."

**Explanation** While processing a dot1x event or message on a dot11 interface, a situation was encountered where an uplink was expected, but not found.

Recommended Action None.

Error Message Information Group rad\_acct: Radius server <ip address> is responding
again (previously dead). Error Group acct: No active radius servers found. Id 106

**Explanation** This message is seen if the **radius-server deadtime 10** command is configured on the access point. This command is configured to set an interval during which the access point does not attempt to use servers that do not respond. Thus avoids the time needed to wait for a request to time out before trying the next configured server. A Radius server marked as dead is skipped by additional requests for the duration of the minutes unless all servers are marked dead. Configuring dead time for 10 minutes means that the server cannot be used for 10 minutes.

**Recommended Action** You can disable this command if you want this log to disappear. Actually this message is not really a major problem, it is just an informational log.

# **WDS Messages**

**Error Message** WLCCP-WDS-6-REPEATER\_STOP: WLCCP WDS on Repeater unsupported, WDS is disabled.

**Explanation** Repeater access points do not support WDS.

Recommended Action None.

Error Message WLCCP-WDS-6-PREV\_VER\_AP: A previous version of AP is detected.

**Explanation** The WDS device detected a previous version of the access point.

Recommended Action None.

Error Message WLCCP-AP-6-INFRA: WLCCP Infrastructure Authenticated

**Explanation** The access point successfully authenticated to the WDS device.

Recommended Action None.

**Error Message** WLCCP-AP-6-STAND\_ALONE: Connection lost to WLCCP server, changing to Stand-Alone Mode

**Explanation** The access point lost its connection to the WDS device and is in stand-alone mode.

Recommended Action None.

Error Message WLCCP-AP-6-PREV VER WDS: A previous version of WDS is detected

**Explanation** The access point detected a previous version of WDS.

**Recommended Action** Check for an unsupported version of WDS on your network.

Error Message WLCCP-AP-6-UNSUP\_VER\_WDS: An unsupported version of WDS is detected

**Explanation** The access point detected an unsupported version of WDS.

**Recommended Action** Check for an unsupported version of WDS on your network.

Error Message WLCCP-NM-3-WNM\_LINK\_DOWN: Link to WNM is down

**Explanation** The network manager is not responding to keep-active messages.

**Recommended Action** Check for a problem with the network manager or with the network path to the network manager.

Error Message WLCCP-NM-6-WNM LINK UP: Link to WNM is up

**Explanation** The network manager is now responding to keep-active messages.

Recommended Action None.

Error Message WLCCP-NM-6-RESET: Resetting WLCCP-NM

**Explanation** A change in the network manager IP address or a temporary out-of-resource state might have caused a reset on the WDS network manager subsystem, but operation will return to normal shortly.

Recommended Action None.

Error Message WLCCP-WDS-3-RECOVER: "%s

**Explanation** WDS graceful recovery errors.

Recommended Action None.

#### Mini IOS Messages

Error Message MTS-2-PROTECT PORT FAILURE: An attempt to protect port [number] failed

**Explanation** Initialization failed on attempting to protect port.

Recommended Action None.

Error Message MTS-2-SET\_PW\_FAILURE: Error %d enabling secret password.

**Explanation** Initialization failed when the user attempted to enable a secret password.

**Recommended Action** None.

**Error Message** Saving this config to nvram may corrupt any network management or security files stored at the end of nvram. Continue? [no]:

**Explanation** This warning message displays on the access point CLI interface while saving configuration changes through the CLI. This is due to insufficient space in flash memory. When a radio crashes, .rcore files are created. These files indicate a firmware or a hardware problem in the radio, although a hardware problem is less likely.

**Recommended Action** This warning message can be prohibited by removing the rcore files generated in flash memory. The rcore files have a .rcore extension. The files can be deleted because they simply show that the radio went down at some point. The .rcore files can be listed on the CLI session and appear similar to this:

r15\_5705\_AB50\_A8341F30.rcore

#### **Access Point/Bridge Messages**

Error Message APBR-4-SEND\_PCKT\_FAILED: Failed to Send Packet on port ifDescr
(error= errornum)errornum: status error number

HASH (0x2096974)

**Explanation** The access point or bridge failed to send a packet. This condition might be seen if there is external noise or interference.

Recommended Action Check for sources of noise or interference.

Error Message APBR-6-DDP\_CLNT\_RESET: Detected probable reset of hosthost: host MAC
address HASH(0x2080f04)

**Explanation** The access point or bridge detects that another infrastructre device has restarted.

Recommended Action If this message appears continuously, reboot the access point.

# **Cisco Discovery Protocol Messages**

Error Message CDP\_PD-2-POWER\_LOW: %s - %s %s (%e)

**Explanation** The system is not supplied with sufficient power.

**Recommended Action** Reconfigure or replace the source of inline power.

# **External Radius Server Error Messages**

Error Message RADUYS: response-authenticator decrypt fail, paklen 32

**Explanation** This error message means that there is a mismatch in the RADIUS shared key between the RADIUS server and the access point.

**Recommended Action** Make sure that the shared key used on the RADIUS server and the access point are the same.

#### **LWAPP Error Messages**

Error Message LWAPP-3-CDP: Failure sending CDP Update to Controller. Reason "s"

Explanation Could not send access point CDP update to controller

Recommended Action None.

Error Message LWAPP-3-CLIENTERRORLOG: "s"

**Explanation** This log message indicates an LWAPP client error event. The message is logged to help in troubleshooting LWAPP access point join problems.

Recommended Action None.

Error Message LWAPP-3-CLIENTEVENTLOG: "s"

**Explanation** This log message indicates an LWAPP client notification event. The message is logged to help in troubleshooting LWAPP access point join problems.

**Recommended Action** None.

**Explanation** Got unsupported CCX radio managment measurement request from controller.

Recommended Action None.

Error Message LWAPP-5-WRONG\_DFS\_SLOT: DFS action on non-DFS radio "d"

Explanation DFS action on radio b/g

#### **Sensor Messages**

**Error Message** SENSOR-3-TEMP\_CRITICAL: System sensor "d" has exceeded CRITCAL temperature thresholds

**Explanation** One of the measured environmental test points exceeds the extreme threshold.

**Recommended Action** Correct the specified condition, or the system may shut itself down as a preventive measure. Enter the **show environment all** to help determine if this is due to temperature or volatage condition. If this is a critical temperature warning, please ensure that the router fans are are operating and that the room cooling and air-conditioning are functioning. This condition could cause the system to fail to operate properly.

Error Message SENSOR-3-TEMP NORMAL: "s" temperature sensor is now normal

**Explanation** One of the measured environmental test points is under normal operating temperature.

Recommended Action None.

**Error Message** SENSOR-3-TEMP\_SHUTDOWN: Shuting down the system because of dangerously HIGH temperature at sensor "d".

**Explanation** One of the measured environmental test points exceeds the operating temperature environment of the router.

**Recommended Action** Investigate the cause of the high temperature.

**Error Message** SENSOR-3-TEMP\_WARNING: "s" temparature sensor "d" has exceeded WARNING temperature thresholds

**Explanation** One of the measured environmental test points exceeds the warning threshold.

**Recommended Action** Closely monitor the condition and correct if possible, by cooling the environment.

**Error Message** SENSOR-3-VOLT\_CRITICAL: System sensor "d" has exceeded CRITCAL voltage thresholds

**Explanation** One of the measured environmental test points exceeds the extreme voltage threshold.

**Recommended Action** Correct the specified condition, or the system may shut itself down as a preventive measure. Enter the **show environment all** to help determine if this is due to volatage condition. This condition could cause the system to fail to operate properly.

**Explanation** One of the measured environmental test points is under normal operating voltage.

**Recommended Action** None.

 $\textbf{Error Message} \quad \texttt{SENSOR-3-VOLT\_WARNING: Voltage monitor "d"("d") has exceeded voltage thresholds }$ 

**Explanation** One of the measured voltage test points indicates that voltage is out of normal range.

**Explanation** Check Power Supplies or contact TAC

# **SNMP Error Messages**

**Error Message** SNMP-3-AUTHFAILIPV6: Authentication failure for SNMP request from hostUnrecognized format '%P'

Explanation An SNMP request was sent by this host which was not properly authenticated.

**Recommended Action** Make sure that the community/user name used in the SNMP req has been configured on the router.

Error Message SNMP-3-INPUT\_QFULL\_ERR: Packet dropped due to input queue full

Explanation Snmp packet dropped due to input queue full error

**Recommended Action** Use the command **show snmp** to see the number of packets dropped. Stop any SNMP access to the device until the error condition is recovered.

Error Message SNMP-3-INTERRUPT\_CALL\_ERR: "s" function, cannot be called from interrupt handler

**Explanation** This message indicates that a call has been made to the function from an interrupt handler. This is not permitted because it will fail and device will reboot down the stack in malloc call.

**Recommended Action** If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

**Error Message** SNMP-4-NOENGINEIDV6: Remote snmpEngineID for Unrecognized format '%P' not found when creating user: "s"

**Explanation** An attempt to create a user failed. This is likely because the engine ID of the remote agent (or SNMP manager) was not configured.

**Recommended Action** Configure the remote snmpEngineID and reconfigure the user. If the problem persists, copy the error message exactly as it appears, and report it to your technical support representative.

**Error Message** SNMP\_MGR-3-MISSINGHOSTIPV6: Cannot locate information on SNMP informs host:Unrecognized format'%P'

**Explanation** A table entry for the mentioned SNMP informs destination cannot be found. As a result, inform notifications will not be sent to this destination.

**Recommended Action** Run the **show snmp host** and **show snmp** commands. Copy the error message and output from the show commands exactly as they appear, and report it to your technical support representative. Deleting and re-adding the informs destination via the **snmp-server host** configuration command may clear the condition. Otherwise, reloading the system may be necessary.

# **SSH Error Messages**

Error Message SSH-5-SSH2\_CLOSE: SSH2 Session from "%s" (tty = "%d") for user '"%s"'
using crypto cipher '"%s"', hmac '"%s"' closed

**Explanation** The SSH Session closure information

**Recommended Action** None - informational message

Error Message SSH-5-SSH2\_SESSION: SSH2 Session request from "%s" (tty = "%d") using
crypto cipher '"%s"', hmac '"%s"' "%s"

**Explanation** The SSH session request information

Recommended Action None - informational message

Error Message SSH-5-SSH2\_USERAUTH: User '"%s"' authentication for SSH2 Session from
"%s" (tty = "%d") using crypto cipher '"%s"', hmac '"%s"' "%s"

**Explanation** The SSH user authentication status information

**Recommended Action** None - informational message

Error Message SSH-5-SSH\_CLOSE: SSH Session from "%s"(tty = "%d") for user '"%s"'
using crypto cipher '"%s"' closed

**Explanation** The SSH Session closure information

**Recommended Action** None - informational message

**Error Message** SSH-5-SSH\_SESSION: SSH Session request from "%s" (tty = "%d") using crypto cipher '"%s"' "%s"

**Explanation** The SSH session request information

**Recommended Action** None - informational message

Error Message SSH-5-SSH\_USERAUTH: User '"%s"' authentication for SSH Session from
"%s" (tty = "%d") using crypto cipher '"%s"' "%s"

**Explanation** The SSH user authentication status information

**Recommended Action** None - informational message

SSH Error Messages