



## APPENDIX

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## Error and Event Messages

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This appendix lists the CLI error and event messages.

### 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: 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: 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: 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.

## ■ Association Management Messages

**Error Message** AUTO\_INSTALL-4-STATION\_ROLE: 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: 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.

# 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.

**Error Message** DOT11-6-ASSOC: Interface [interface], Station [char] [mac] Associated

**Explanation** A station associated to an access point.

**Recommended Action** None.

**Error Message** DOT11-6-ADD: Interface [interface], Station [mac] Associated to Parent [mac]

**Explanation** A station associated to an access point.

**Recommended Action** None.

**Error Message** DOT11-6-DISASSOC: Interface [interface], Deauthenticating Station [mac] [char]

**Explanation** A station disassociated from an access point.

**Recommended Action** None.

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

**Explanation** A station roamed to a new access point.

**Recommended Action** None.

**Error Message** LEAPCL-3-FAILED: AP Authentication to the WDS failed

**Explanation** The access point failed to authenticate to the WDS device because the username or password were incorrect.

**Recommended Action** Correct the username and password configuration on either the access point or the authentication server.

**Error Message** LEAPCL-3-TIMEOUT: AP Timed out authenticating to the WDS

**Explanation** The access point failed to authenticate to the WDS device in the required time.

**Recommended Action** None.

## Unzip Messages

**Error Message** SOAP-4-UNZIP\_OVERFLOW: Failed to unzip Flash:/c1200-k9w7-mx.122-3.6.JA1/html/level15/ap\_xxx.htm.gz, exceeds maximum uncompressed html size

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

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

**802.11 Subsystem Messages**

# 802.11 Subsystem Messages

**Error 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.

**Error 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: Interface [interface] no valid infrastructure SSID configured, radio not started

**Explanation** For the access point to function as a repeater, at least one active SSID must be designated as an infrastructure SSID.

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

**Error Message** DOT11-4-VERSION\_MISMATCH: Require radio version [hex].[int], found version [hex].[int]

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

**Recommended Action** None.

**Error Message** DOT11-4-VERSION\_UPGRADE: Interface [number], upgrading radio firmware

**Explanation** When starting the radio, 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: Unable to find required radio version [hex].[int]

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

**Recommended Action** None.

**Error Message** DOT11-4-NO\_SSID: No SSIDs configured, radio 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-FLASHING\_RADIO: Flashing the radio firmware ([chars])

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

**Recommended Action** None.

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

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

**Recommended Action** None.

**Error Message** DOT11-2-NO\_FIRMWARE: No radio firmware file ([chars]) was found

**Explanation** When trying to Flash new firmware into the radio, 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: Radio firmware file ([chars]) is invalid

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

**Recommended Action** Put the correct firmware image file in the place where the unit is looking.

**Error Message** DOT11-2-RADIO\_FAILED: Interface [interface] failed – [chars]

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

**Recommended Action** None.

**Error Message** DOT11-4-FLASH\_RADIO\_DONE: Flashing the radio firmware completed

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

**Recommended Action** None.

**802.11 Subsystem Messages**

**Error Message** DOT11-4-LINK\_DOWN: Radio parent lost: [chars]

**Explanation** The connection to the parent access point was lost for the displayed reason. The unit will try to find a new parent access point.

**Recommended Action** None.

**Error Message** DOT11-4-CANT\_ASSOC: Cannot associate: [chars]

**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-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.

**Error Message** DOT11-4-BRIDGE\_LOOP: Bridge loop detected between WGB [mac-address] and device [mac-address]

**Explanation** A workgroup bridge reported the address of one of its 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 Dot11Radio1, current antenna position not supported, radio disabled

**Explanation** The 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 [number] Radio failed to pass RF loopback test

**Explanation** Radio loopback test failed for a radio interface.

**Recommended Action** None.

**Error Message** DOT11-3-RF\_LOOPBACK\_\_FREQ\_FAILURE: Radio failed to pass RF loopback test at freq [frequency]

**Explanation** Radio loopback test failed at a given frequency.

**Recommended Action** None.

**Error Message** DOT11-AUTH\_FAILED: Station [mac-address] authentication failed

**Explanation** The station failed authentication. Severity level: 7.

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

**Error Message** DOT11-CCKM\_AUTH\_FAILED: Station [mac-address] CCKM authentication failed

**Explanation** The station failed CCKM authentication. Severity level: 7.

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

**Error Message** DOT11-TKIP\_MIC\_FAILURE: TKIP Michael MIC failure was detected on a packet (TSC=0x0) received from [mac-address]

**Explanation** TKIP Michael MIC failure was detected on a unicast frame decrypted locally with the pairwise key. Severity level: 4.

**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-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 a station notifying the access point that TKIP Michael MIC failed on a packet transmitted by this access point. Severity level: 4.

**Recommended Action** None.

## ■ Inter-Access Point Protocol Messages

**Error Message** DOT11-TKIP\_MIC\_FAILURE\_REPEAT: 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** Because MIC failures usually indicate an active attack on your network, the interface will be put on hold for the configured 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. Severity level: 3.

**Recommended Action** Michael 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** Multicast received for AP sa [mac-address], da [mac-address], ra ccbc.ccbc.ccbc ta [mac-address]

**Explanation** The access point received a direct broadcast/multicast frame in which the dot11 MAC header's RA address field is a broadcast/multicast address.

**Recommended Action** None. However, if your access point displays this message frequently, capture these frames with a sniffer for further analysis.

**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** None.

# Inter-Access Point Protocol Messages

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

**Explanation** A station has roamed to a new access point.

**Recommended Action** None.

**Error Message** DOT11-6-STANDBY\_ACTIVE: Standby to Active, Reason = [chars] ([int])

**Explanation** The access point is transitioning from standby mode to active mode.

**Recommended Action** None.

**Error Message** DOT11-6-ROGUE\_AP: Rogue AP [mac-address] reported. Reason: [chars]

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

**Recommended Action** None.

**Error Message** SCHED-3-UNEXPECTEDMESSAGE: Unknown message [hex] received (ptr arg [hex], num arg [hex]).

**Explanation** A process can register to be notified when various events occur in the router. This message indicates that a process received a message from another process that it does not know how to handle.

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

**Error Message** SCHED-3-UNEXPECTEDEVENT: Process received unknown event (maj [hex], min [hex]).

**Explanation** A process can register to be notified when various events occur in the router. This message indicates that a process received an event that it did not know how to handle.

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

**Error Message** DOT11-STANDBY-REQUEST: Hotstandby request to shut down radios from [mac-address]

**Explanation** A standby access point has requested this access point to shut down its radio interfaces because a failure has been detected on one of this access point's radio interfaces. Severity level: 6.

**Recommended Action** None.

## Radio Diagnostic Messages

**Error Message** DOT11-RM-INCAPABLE: Interface [interface]

**Explanation** This interface has been requested to send a radio management request, but this interface does not support radio management. Severity level: 4.

**Recommended Action** None.

## Local Authenticator Messages

**Error Message** DOT11-RM-INCORRECT-INTERFACE: Invalid interface, either not existing or non-radio

**Explanation** This interface has been requested to send a radio management request, but this interface either does not exist or is not a radio interface. Severity level: 4.

**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.

**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.

# 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.

**WDS Messages**

**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 everything will get back to normal shortly.

**Recommended Action** None.