

VPDN Messages

The following are Virtual Private Dialup Networking (VPDN) messages.

Error Message

```
%VPDN-6-AUTHENERR: [chars] [chars] [chars] cannot authenticate for [chars] [chars] [chars] [chars] [chars]
```

Explanation The NAS/LAC or HGW/LNS is unable to locate a AAA server for the purposes of authenticating the user or tunnel. This error indicates that the router was unable to establish a network connection with the designated server. This error message can contain a reason string that identifies the point of failure.

Recommended Action Check the AAA configuration on the NAS/LAC or HGW/LNS and the network connectivity to the AAA server.

Error Message

```
%VPDN-6-AUTHENFAIL: [chars] [chars] [chars], [atalk_address] authentication failure [chars] for [chars] [chars] [chars] [chars] [chars]
```

Explanation The NAS/LAC or HGW/LNS has failed to authenticate a user or a tunnel, or the HGW/LNS has failed authentication with the client that initiated the session. For errors that involve user or tunnel authentication failures, this error message will contain a reason string that identifies the point of failure.

Recommended Action If the HGW/LNS is failing authentication check the user name configuration on the NAS/LAC or HGW/LNS and possibly even on the client. Removing the negotiation of outbound authentication (for example, by authenticating the user only in the inbound direction) is one possible solution. If AAA is applicable, check the AAA configuration on the NAS/LAC or HGW/LNS and network connectivity to the AAA server.

Error Message

```
%VPDN-6-AUTHORERR: [chars] [chars] [chars] cannot authorize for [chars] [chars] [chars] [chars] [chars]
```

Explanation The NAS/LAC or HGW/LNS is unable to locate a AAA server for the purposes of authorizing the user or tunnel. The router was unable to establish a network connection with the designated (configured) server. This error message may contain a reason string that identifies the point of failure.

Recommended Action Check the AAA configuration on the NAS/LAC or HGW/LNS and the network connectivity to the AAA server.

Error Message

%VPDN-6-AUTHORFAIL: [chars] [chars] [chars], [atalk_address]authorization failure for [chars] [chars] [chars][chars][chars]

Explanation The NAS/LAC or HGW/LNS has failed to authorize a user or a tunnel. This error message might contain a reason string that identifies the point of failure.

Recommended Action Check authorization configuration on the NAS/LAC or HGW/LNS. If AAA is applicable, check network connectivity to the AAA servers.

Error Message

%VPDN-6-CLOSED: [chars] [chars] [chars] closed [chars] [chars] [chars][chars][chars]

Explanation The remote server, typically the HGW/LNS, has closed this session. The reason for the closure is encoded in a hexadecimal format and corresponds to the particular protocol descriptions; for example, for L2F the values are documented in section 4.4.5 of the Internet Draft. A description string that describes the closure reason might also be present.

Recommended Action Check the configuration on the NAS/LAC or HGW/LNS.

Error Message

%VPDN-6-DOWN: [chars] [chars] [chars] changed state to down [chars] [chars] [chars][chars][chars]

Explanation The remote server, typically the HGW/LNS, closed this tunnel. The reason for the closure is encoded in a decimal format, which corresponds to the particular protocol descriptions (for example, for L2F, the values are documented in section 4.4.5 of the Internet Draft).A description string that describes the reason for this closure may also be included in the message.

Recommended Action Check the configuration of the NAS/LAC or the HGW/LNS.

Error Message

%VPDN-6-MAX_SESS_EXCD: [chars] [chars] [chars] has exceeded configured local session-limit and rejected [chars] [chars] [chars][chars][chars]

Explanation The NAS/LAC or HGW/LNS has refused this session because the configured maximum VPDN session limit has been reached.

Recommended Action Check the configuration on the HG or LNS.

Error Message

%VPDN-4-MIDERROR: [chars] [chars] [chars] unable to terminate user
[chars] [chars] [chars]

Explanation The HGW/LNS could not forward the VPDN user because of an internal error. This error may be either resource-/ or configuration-related. The error message may contain a reason string that reports the point of failure.

Recommended Action Check the configuration on the HGW/LNS.

Error Message

%VPDN-5-NOIDB: [chars] [chars] [chars] unable to terminate user [chars]

Explanation The HGW/LNS has reached the maximum number of interfaces allowed on the router and cannot create sessions for users forwarded by VPDN.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VPDN-3-NORESOURCE: [chars] [chars] [chars] no resources for user
[chars] [chars] [chars]

Explanation The NAS/LAC or HGW/LNS is out of resources to forward a VPDN user. This error may be caused by low system memory, or high current CPU utilization.

Recommended Action . Enter the **show memory** command and check the available memory in processor and I/O memories. If there is not enough memory, reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration. If the error recurs, enter the **show processes** command and check the current CPU utilization. If the utilization is maximum, reduce system activity to ease processing demands. If the error recurs, copy the error message exactly as it appears on the console or in the system log. Enter the show memory and show processes commands. Contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VPDN-4-REFUSED: Session for [chars] Refused status = [hex]

Explanation The remote server has refused this session.

Recommended Action Check the configuration on the HGW/LNS.

Error Message

%VPDN-6-RESIZE: Updated [chars] MID table size to [int]

Explanation The NAS/LAC or HGW/LNS has altered the size of the MID table through command line configuration.

Recommended Action No action is required.

Error Message

%VPDN-6-SOFTSHUT: [chars] [chars] [chars] has turned on softshut and rejected [chars] [chars] [chars][chars][chars]

Explanation The NAS/LAC or HGW/LNS can no longer accept new connections when the **vpdn softshut** command has been entered. This feature prevents new sessions from being established on a VPN tunnel. The existing session will continue until termination.

Recommended Action To disable the VPDN feature and return the VPN tunnel to active service, enter the **no vpdn softshut** command.

Error Message

%VPDN-6-TIMEOUT: [chars] [chars] [chars] disconnected [chars] [chars] [chars] [chars] [chars]

Explanation The NAS/LAC or HGW/LNS has disconnected the user because the timer has expired. This error may be related to a PPP negotiation error or might be an absolute timeout for the session.

Recommended Action Check the configuration on the NAS/LAC or HGW/LNS. Check the value set in timeout absolute field in the configuration. Enter the **debug ppp negotiation** command on the router to check if the timeout is during the PPP negotiation. If the error still occurs, copy the error message exactly as it appears on the console or in the system log, along with the configuration information and debug messages, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VPDN-5-UNREACH: [chars] [chars] [chars] is unreachable

Explanation The NAS/LAC or HGW/LNS has timed out while attempting to establish a tunnel connection to a HGW/LNS or NAS/LAC. This error might be caused by network, authentication, or authorization issues.

Recommended Action Check configuration on the NAS/LAC or HGW/LNS. Check the network connectivity between the NAS/LAC and the HGW/LNS. Ensure that the tunnel configuration uses a different source IP address from that of the NAS/LAC.

VPN_HW Messages

The following are VPN Hardware Accelerator for IPSEC messages.

Error Message

```
%VPN_HW-1-ALIGN: Slot: [dec] - Alignment failure on packet buffer: [hex]
```

Explanation A software error occurred. The VPN hardware accelerator driver has detected that the buffer is not aligned correctly.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VPN_HW-1-ERROR: slot: [dec] - [chars]
```

Explanation An error occurred in the application that is using VPN hardware.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VPN_HW-1-HEARTBEAT: VPN Module in slot: [dec]: Keepalive lost.
```

Explanation The VPN hardware accelerator appears to have stopped operating.

Recommended Action Reboot your router. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VPN_HW-6-INFO: slot: [dec] [chars]
```

Explanation This is informational message from VPN hardware accelerator driver.

Recommended Action This message occurs in normal operation. No action is required.

Error Message

```
%VPN_HW-1-INITFAIL: Slot [dec]: [chars]
```

Explanation The VPN hardware accelerator driver failed to initialize the accelerator at the slot specified in the error message at the specified point.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VPN_HW-3-MULTDEV: Cannot support more than one Encryption AIM
```

Explanation A second Encryption AIM was discovered as being present in the system. The Encryption AIM software only supports a single Encryption AIM. All other Encryption AIMS installed will be ignored.

Recommended Action Remove one of the Encryption AIMS installed in your system.

Error Message

```
%VPN_HW-1-NOMEMORY: [chars] creation failed for slot [dec]
```

Explanation During VPN hardware initialization, the VPN hardware driver could not allocate memory for the data structure that is specified in the error message.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VPN_HW-1-OWNER: slot: [dec]: [chars] packet buffer, pak=[hex]
```

Explanation A software or hardware error has occurred. The VPN hardware accelerator driver has detected that the buffer ring is in an inconsistent and unrecoverable state.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VPN_HW-1-PACKET_ERROR: slot: [dec] Packet Encryption/Decryption error, [chars]

Explanation An unexpected error occurred during the encryption or decryption of a packet.

Recommended Action This message can occur occasionally during normal operation of the system. It may occur during the transition to a new session key for a Security Association. In such cases, no action is required. However, if it happens frequently, or is associated with traffic disruption, note the status value and contact your Cisco technical support representative. The VPN hardware accelerator will most likely require replacement.

Error Message

%VPN_HW-6-SHUTDOWN: [chars] shutting down

Explanation The specified VPN hardware is shutting down. It may have been physically removed.

Recommended Action This is an informational message only. It occurs in normal operation. No action is required.

Error Message

%VPN_HW-1-TOOBIG: Slot: [dec] - [chars] received a packet with size [dec].

Explanation A packet that was too large was received. The hardware supports only the MTU size specified in the error message.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VPN_HW-1-UNSUPP: VPN Module in slot: [dec]: [chars] ([hex]).

Explanation This revision or version of the VPN hardware accelerator in the slot specified in the error message is not supported.

Recommended Action Verify the VPN hardware adapter is the proper hardware level and software revision for the running version of IOS. If it is, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

VRM Messages

The following are Voice Resource Management (VRM) messages.

Error Message

```
%VRM-5-CARD_UP: Voice card ([chars]) in slot [dec] is UP
```

Explanation The voice card on the system is up.

Recommended Action No action is required.

Error Message

```
%VRM-4-INVALID_CARD: Voice Card in slot [dec] different from other voice cards present in the system. Please remove it as all voice cards need to be of same type
```

Explanation The use of voice cards of various complexity types is not supported. All voice cards must be of same type (for example, all medium complexity or all high complexity).

Recommended Action The card of a different type will not boot. Remove it and insert another card of the same type as that of the cards that are already present.

VRRP Messages

The following are Virtual Router Redundancy Protocol (VRRP) messages.

Error Message

```
%VRRP-6-STATECHANGE: [chars] Grp [dec] state [chars] -> [chars]
```

Explanation The VRRP router has changed state.

Recommended Action No action is required.

VSI_M Messages

The following are Virtual Switch Interface (VSI) master messages.

Error Message

```
%VSI_M-1-AVAILCHANALARM: Available Channel Count below low threshold  
(threshold/count = [dec]/[dec])
```

Explanation This message warns that the available channel count reported on one or more VSI-controlled interfaces has fallen below the low-threshold value. This message indicates imminent resource exhaustion. When resource exhaustion occurs, the setup of cross-connects will fail.

Recommended Action Determine available channel counts for all interfaces being controlled by the LSC to determine which VSI slave partition needs to be adjusted. Adjust the LCN minimum and maximum values in the ATM switch to accommodate the increased resource requirements. If the low threshold value is set too high and the available channel count is acceptable, the actual threshold may be lowered. The low threshold should be set sufficiently high to allow ample time to prevent resource exhaustion.

Error Message

```
%VSI_M-6-AVAILCHANOK: Available Channel Count returned above high threshold  
(threshold/count = [dec]/[dec])
```

Explanation This message informs that the available channel count reported on all VSI-controlled interfaces has returned to a level above the high-threshold value. This message informs that imminent resource exhaustion is no longer an issue.

Recommended Action No action is required.

Error Message

```
%VSI_M-4-AVAILCHANWARN: Available Channel Count below high threshold  
(threshold/count = [dec]/[dec])
```

Explanation This message warns that the available channel count reported on one or more VSI-controlled interfaces has fallen below the high-threshold value. This warning indicates the potential for resource exhaustion. When resource exhaustion occurs, the setup of cross-connects will fail.

Recommended Action Determine available channel counts for all interfaces being controlled by the LSC to determine which VSI slave partition needs to be adjusted. Adjust the LCN minimum and maximum values in the ATM switch to accommodate the increased resource requirements. If the high-threshold value is set too high and the available channel count is acceptable, the actual threshold may be lowered. The high threshold should be set sufficiently high to allow for ample warning before resource exhaustion occurs.

Error Message

```
%VSI_M-3-INCOMPATVER: None of the VSI versions ([int]-[int]) for session [dec] on [chars] can be used
```

Explanation The VSI master on the TSC and the VSI slaves on the controlled switch must use the same version of the VSI protocol. This error reports that the slave for the indicated session on the indicated control interface does not support a VSI version that is also supported by the VSI master and all the other slaves. The session cannot be established until the VSI master and all the other slaves use the same version of the VSI protocol. This error indicates that the Cisco IOS software version running on the TSC is not compatible with the Cisco IOS software running on the controlled switch.

Recommended Action Determine which versions of Cisco IOS software are running on the TSC and the controlled switch, and upgrade the Cisco IOS software or firmware that is out of date.

Error Message

```
%VSI_M-2-XCONNFAIL: Cross-connect [chars]/[int]/[int] [chars] [chars]/[int]/[int] failed unexpectedly
```

Explanation One or more cross-connects that were previously established by the TSC through the VSI have failed. The TVC of which this cross-connect was a part will no longer carry traffic end to end. The failure may be caused by an unexpected condition on the switch that the TSC controls, or it may be caused by a switch configuration error that happened while the switch was not in communication with the TSC, but before the TSC detected this lack of communication.

Recommended Action Verify that all cross-connects exist. If cross-connects are not found, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

VTSP Messages

The following are Voice Telephony security parameter index (SPI) messages.

Error Message

```
%VTSP-3-CAPABILITYMISMATCH: voice port [chars]: call connection id [[hex] [hex] [hex] [hex]]
```

Explanation There was a capabilities mismatch between the two call legs. Capabilities are negotiated among the call legs for CODEC, VAD and FAX rate.

Recommended Action Ensure that the dial peer configuration is appropriate for the interface in question. Also ensure that the configuration on the interface is correct.

Error Message

%VTSP-3-DOCALLHISFAIL: vtsp_do_call_history: [chars]

Explanation An attempt to allocate or insert an active VTSP call record into the call history list has failed.

Recommended Action No action is required.

Error Message

%VTSP-3-DSPALARM: channel [chars], DSP ID [hex]: status=[hex] message=[hex]
text=[chars]

Explanation The DSP has reported a fatal error. All calls on the DSP were dropped, and a DSP reload was attempted.

Recommended Action Verify that the DSP reloaded properly by attempting to place a call on the affected voice port. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VTSP-3-DSP_TIMEOUT: DSP timeout on channel [chars], event [hex]: DSP ID=[hex]:
[chars] (call mode=[dec])

Explanation A timeout on DSP response has occurred.

Recommended Action The DSP has been automatically reset. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VTSP-4-FSM_BAD_EVENT: Invalid FSM Input on channel [chars]: state=[chars]
event=[dec]

Explanation An internal state machine has encountered illegal input. This condition represents an internal software fault and may manifest itself as dropped or hung calls.

Recommended Action If dropped or hung calls are occurring along with receipt of this message, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VTSP-3-FSM_ERROR: [chars]

Explanation An internal finite-state machine error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VTSP-3-MSGSNDFAIL: channel:[chars] DSP ID:[hex] Message ID:[hex]
```

Explanation A message could not be sent to the DSP. The call continued but may have experienced problems.

Recommended Action Verify that the DSP is still functioning properly by attempting to place a call on the affected voice port. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VTSP-3-NOEVENT: no free event structure available from [chars] for DSP message
```

Explanation There were no event structures remaining in the system pools to alert the router of a voice or signaling event.

Recommended Action Check that the voice port for which the event was reported is still operational. If the voice port was not operation, clear it.

Error Message

```
%VTSP-3-VTSP_BLOCK: vtsp_call_block allocate failed
```

Explanation A memory shortage has caused a call block allocation to fail.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

```
%VTSP-3-VTSP_CALL_DISC_FAILED: VTSP call disconnect failed. channel id [chars],  
ret [dec]
```

Explanation VTSP call disconnect could not be successfully passed. This failure may result in hung calls.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VTSP-3-VTSP_DB_ERR: vtsp_call_block database error
```

Explanation An internal VTSP call block database error has occurred. This message represents an internal software fault that can display in the system either as dropped or hung calls.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VTSP-3-VTSP_HAIRPIN_FAILED: Call hairpinning failed. cdb [hex], dst_cdb [hex], dst_call_id [dec]

Explanation A call with no DSP could not be forwarded from the access server to another device. This failure may occur because no TDM resources are available and traffic is heavy.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VTSP-3-VTSP_HAIRPINN: hairpin peer cdb does not exist, cdb [hex], dst_call_id [dec]

Explanation A memory shortage has caused the RBTreeCreate process to fail.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VTSP-3-VTSP_HAIRPIN_NOTPOSSIBLE: Call can't be hairpinned. cdb [hex], dst_cdb [hex], dst_call_id [dec]

Explanation A call with no DSP could not be forwarded to another device.

Recommended Action Check the dial-peer configuration.

WCCP Messages

The following are WCCP messages.

Error Message

%WCCP-5-CACHEFOUND: Web Cache [IP_address] acquired

Explanation The router has acquired the specified web cache service.

Recommended Action No action is required.

Error Message

%WCCP-1-CACHELOST: Web Cache [IP_address] lost

Explanation The router has lost contact with the specified web cache service.

Recommended Action Verify the operation of specified web cache service.

WIC_AM Messages

The following are WIC-AM modem initialization messages.

Message

```
%WIC_AM-3-WIC_AM_BAD_COUNTRY_CODE:. The country code: %[chars] is not supported in %[chars]
```

Explanation The WIC-am does not support the country code.

Recommended Action Select another modem country code or contact TAC to get a patch for the country code.

Message

```
%WIC_AM-3-WIC_AM_BAD_SPEED: The modem line only supports a speed of 115200.
```

Explanation The WIC only supports 115200 bps. There is no need to change this since the connection between DTE and DCE is local, within the WIC.

Recommended Action No action is required.

Message

```
%WIC_AM-3-WIC_AM_BAD_STOPBIT: Cannot set stop bits for this async interface.
```

Explanation The WIC interface only supports 1 stopbit. There is no need to change this since the connection between DTE and DCE is local, within the WIC.

Recommended Action No action is required.

X25 Messages

The following are X.25 messages.

Error Message

```
%X25-3-ADDRESSBAD: Interface [chars], x25 address [chars] subaddress [char] is too long
```

Explanation This message occurs when a subaddress is configured. When this subaddress is combined with the X.121 address of the interface, the total address exceeds the limit of 15 characters.

Recommended Action Reconfigure the subaddress so that this does not happen.

Error Message

%X25-3-BADCONFIG: Interface [chars], X.25 [chars], current config. retained

Explanation The X.25 configuration of the interface is not valid. The existing configuration was not changed.

Recommended Action Ensure that the switched virtual circuit ranges of the interface do not overlap; for nonzero values, $lic \leq hic < ltc \leq htc < loc \leq hoc$. (For more information, refer to “Configuring X.25 and LAPB” in the *Cisco IOS Wide-Area Networking Configuration Guide*.) If an incoming-only range is defined, ensure that it is numerically less than the two-way range. If an outgoing-only range is defined, check that it is numerically greater than the two-way range. No virtual circuit high/low parameter is zero unless its partner low/high parameter is also zero. The default window sizes are less than the interface modulo.

Error Message

%X25-3-BADCONFIGATTEMPT: Attempt to [chars].

Explanation The user has attempted an illegal configuration.

Recommended Action The error will indicate what invalid action was attempted. Check your configuration, and if necessary, contact a Cisco technical support representative for assistance.

Error Message

%X25-4-BADMBIT: Interface [chars], VC [dec], partial data packet has M-bit set

Explanation A virtual circuit has been set up using the default maximum packet sizes, but the DTE and DCE are not configured with the same default values. A packet was received that had the M-bit set, signifying that more data follows, but the packet did not carry the maximum number of bytes allowed. Such partial data packets must have the M-bit cleared. The resulting loss of a message boundary might cause problems for the data recipient.

Recommended Action Verify the default flow control parameters of the DTE and the DCE. If this message recurs, contact your Cisco technical support representative for assistance.

Error Message

%X25-4-BADUPCALL: Interface [chars], Unexpected call ([chars]) from LLC2
DTE=[hex] [hex] . [hex] [hex] . [hex] [hex] .

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-4-BFEIP: Warning: IP address is missing or incompatible with BFE mode

Explanation An interface configured for X.25 BFE mode does not have an IP address configured, or the IP address does not conform to BFE requirements. The interface cannot be mapped to an X.121 address.

Recommended Action Configure a valid Class A IP address for the interface or remove the **bfe** option from the **encapsulation x25** command for the interface.

Error Message

%X25-3-COMPERR: Interface [chars] LCI [dec] low-level stac compression error

Explanation A stacker compression algorithm internal error or shortage of buffer space was encountered during a compression operation. This error should never happen.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-4-DEBUG_LCI: LCI deleted at interrupt time

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-7-DIAGEVENT: Interface [chars], X.25 diagnostic event, [chars], lci [dec] [chars]

Explanation A standard X.25 diagnostic event has been detected. Per Recommendation X.25, a DCE detecting this condition will send a diagnostic packet, but a DTE cannot send a diagnostic packet. Recommendation X.25 defines diagnostic events for packets occurring on an unassigned channel, receipt of some classes of malformed packets, nonstandard usage of channel 0 for call setup or data traffic, and some protocol timeout events. An unexpected but harmless diagnostic event may occur when an attached station does not respond to a protocol event soon enough (for example, if a timeout waiting for a response to a Call, Clear or Reset was sent). The most common diagnostic event that might have an effect on system operation is a mismatched configuration of the logical channel ranges between the DTE and DCE stations.

Recommended Action If an attached station is delaying responses to protocol events, check if the appropriate timeout value is sufficient for expected network behavior and if the connected station is unduly delaying its response. For unassigned logical channel events, enter the **show x25 interface id** command, where *id* is the keyword serial and number of the serial interface used for X.25, for the reporting station to verify that the configured logical channel assignments are correct and operational. These ranges must match those defined on the connected station; refer to the [“Setting the Virtual Circuit Ranges”](#) section of the [Cisco IOS Wide-Area Networking Configuration Guide](#)

for more information. For the rare case in which logical channel 0 is designated for nonstandard call setup or data traffic, both stations must be configured to reflect that usage. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-7-DIAGRX: Interface [chars], X.25 Diagnostic received, [chars][chars]

Explanation An X.25 diagnostic packet has been received at the DTE from the DCE. Per Recommendation X.25, a DCE station must send a diagnostic packet when it detects a standard diagnostic event, which the DTE must discard with no protocol action taken; a DTE cannot send a diagnostic packet. Recommendation X.25 defines diagnostic events for packets occurring on an unassigned channel, receipt of some classes of malformed packets, nonstandard usage of channel 0 for call setup or data traffic, and some protocol timeout events. An unexpected but harmless diagnostic packet can be received when the DTE station does not respond to a protocol event soon enough (for example, the DCE timed out waiting for a response to a Call, Clear or Reset message). The most common diagnostic event that might affect system operation is a mismatched configuration of the logical channel ranges between the two stations.

Recommended Action If an attached station is delaying responses to protocol events, check if the appropriate timeout value is sufficient for expected network behavior and if the connected station is unduly delaying its response. For unassigned logical channel events, enter the **show x25 interface id** command, where *id* is the keyword serial and number of the serial interface used for X.25, for the reporting station to verify that the logical channel assignments configured are correct and operational. These ranges must match those defined on the connected station; refer to the “[Setting the Virtual Circuit Ranges](#)” section of the [Cisco IOS Wide-Area Networking Configuration Guide](#) for more information. For the rare case in which logical channel 0 is designated for nonstandard call setup or data traffic, both stations must be configured to reflect that usage. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-3-ERR_SUBST_XOT_DNS_DEST: Error substituting regular expression for XOT DNS destination pattern

Explanation The regular expression substitute utility has failed to produce the X.25 host name pattern to be sent to the DNS for address resolution.

Recommended Action Correct the DNS substitution pattern that was specified in the **x.25 route** command.

Error Message

%X25-2-ILLP4: Interface [chars], Illegal state [chars] when P4

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-3-INTIMEQ: Interface [chars], LCN [dec] already in timer queue, new time [time-stamp]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-3-INVCFGID: [dec] is not a valid X.25 configuration ID

Explanation An invalid configuration ID has been used.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-4-LARGEPKSIZE: Interface [chars], [chars] packet sizes [dec]/[dec] too large; lower values will be negotiated

Explanation The default packet sizes or outgoing packet size facility values of the interface are too large to be carried by LAPB. The router will negotiate lower packet size values automatically.

Recommended Action Increase the LAPB N1 value. For example, for an X.25 maximum packet size of 1024 bytes, the modulo 8 X.25 operation will add 3 bytes of overhead, and the modulo 8 LAPB operation will add 4 bytes of overhead (the two bytes of CRC are defined to be included). Therefore, the LABP N1 value must be at least 8248 bytes (1031 bytes * 8 = 8248).

Error Message

%X25-3-LCIBOGUS: in x25_timer NULL lci_idb [hex]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-5-NOBUF: Interface [chars] LCI [dec] [chars]

Explanation A decompression buffer was not available for an incoming compressed packet. This message is a warning only (the compressed packet was not lost). However, an X.25 packet layer RNR (wait) was generated, and packet-level transmission on the LCN will not resume (RR issued) until a decompression buffer becomes available.

Recommended Action If this message occurs frequently, you may need to modify the buffer pool. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-3-NOLCI: Interface [chars], Delete: lci [dec] not found in [chars] table

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-3-NOTFINDBH: Can't find bfe host address [IP_address] to delete

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-4-PARTIALMAP: Interface [chars], [chars] encapsulation call from [chars] partially mapped to [chars]

Explanation An incoming X.25 call specified a protocol that was assigned to a multiprotocol map; the VC will not be able to carry the full set of protocols specified by the map.

Recommended Action Modify the configuration of the router or the far host to match the encapsulation method used.

Error Message

%X25-5-PBPDBIT: Interface [chars] LCI [dec] PBP Compression does not support X25 D bit

Explanation Compression is not enabled because D-bit support is configured for the LCI.

Recommended Action Reconfigure the interface without D-bit support, or do not attempt to run with compression.

Error Message

%X25-5-PBPHOLDQ: Interface [chars] LCI [dec] X25 Hold queue needs to be at least default size

Explanation An attempt was made to configure the X.25 hold queue to less than the minimum value of 10 packets.

Recommended Action Configure the X.25 hold queue to be 10 packets or more.

Error Message

%X25-5-PBPNOEND: Interface [chars] LCI [dec] End system not configured for X25 PBP

Explanation A compression or decompression operation was attempted by a router other than an end router. Only end routers can perform compression and decompression.

Recommended Action Reconfigure the routers so that only the end routers in the network perform compression and decompression.

Error Message

%X25-3-PROFILENO: profile [chars] does not exist

Explanation An X.25 interface has been configured to use an X.25 profile that does not exist.

Recommended Action Create and configure the X.25 profile by entering the **x25 profile name** global configuration command before referencing the profile.

Error Message

%X25-3-PVCBAD: Interface [chars], PVC [dec], [chars]

Explanation A switched PVC cannot be connected. The final [chars] text string in the message represents the state of the PVC. These text strings can also appear within the output of the **show x25-vc** command. For more information, refer to the **show x25-vc** command documentation in the *Cisco IOS Wide-Area Networking Command Reference*.

Recommended Action Validate the configuration of the PVCs at both ends of the connection, and reconfigure them if necessary.

Error Message

%X25-4-RANGEUNUSED: Interface [chars], [chars] VC range unused; set limits to zero

Explanation An outdated method was used to specify a virtual circuit range. (An outgoing-only or incoming-only virtual circuit range exactly overlaps the two-way virtual circuit range.)

Recommended Action To specify a virtual circuit range, use the current method and set the range limits to zero. To write the configuration to memory, enter the **copy running-config startup-config** command in privileged configuration mode. Using the **copy running-config startup-config** command will store the modified (zero) range limits.

Error Message

%X25-3-SIZEBAD: Interface [chars] LCI [dec] Decompression size error

Explanation An internal software error has occurred. The PBP header has an uncompressed packet size field. Each uncompressed packet size is checked against this field.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-3-SPURD1: Interface [chars], Spurious D1 timer wakeup on LCI [dec]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-3-SYNCBAD: Interface [chars] LCI [dec] Decompression sync error. expected [dec] got [dec]

Explanation An internal software error involving the PBP header has occurred. The PBP header has an 8-bit synchronization field that is checked on each received packet.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-3-TRUNCATE_ALT_XOT_DNS_DEST: Truncating excess XOT addresses ([dec]) returned by DNS

Explanation An X.25 route DNS lookup has returned more than the maximum number of permissible XOT destination addresses.

Recommended Action Review the DNS database entries used for XOT destination lookup and change the configuration so that no more than 6 XOT destination addresses exist.

Error Message

%X25-3-UNKNOWNPROT: [chars] : Unable to identify lower layer protocol

Explanation The IDB is not using X.25 and therefore cannot support the lower-level CMNS protocol.

Recommended Action Check your hardware configuration or contact your Cisco technical support representative for assistance.

Error Message

%X25-5-UPDOWN: Interface [chars] - DLCI [dec] X.25 packet layer state changed to [chars]

Explanation The state of the X.25 context associated with the DLCI has changed.

Recommended Action No action is required.

Error Message

%X25-4-VCLOSTSYNC: Interface [chars], VC [dec] TCP connection [chars]

Explanation An X.25 circuit that is being tunneled over a TCP connection between routers was not cleared completely. The last [chars] text string in the message can take one of two forms. If the text string is “closed unexpectedly,” the router at the remote end of the connection was rebooted, or the connection failed. If the text string is “connection corrupted,” it is likely that the connection was made to a router running an older Cisco IOS software release.

Recommended Action If the text string is “closed unexpectedly,” reestablish the connection after the remote router or intervening network becomes operational. If the text string is “connection corrupted,” upgrade to a more recent version of the Cisco IOS software for the router at the other end of the connection.

Error Message

%X25-3-VERSIONBAD: Interface [chars] LCI [dec] Compression Version mismatch expected [hex] received [hex]

Explanation An internal software error has occurred involving the PBP header. The PBP header has a mismatched version field. The version is checked on each received packet.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-3-X25DEENCINV: [chars]

Explanation An X.25 service configuration is being removed.

Recommended Action If this was not a desired action, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%X25-3-X25ENCINV: [chars]
```

Explanation An X.25 service is being configured.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%X25-3-X25INT: Interface [chars], X.25 internal error [chars]
```

Explanation This is a general message covering numerous internal X25 error conditions. The message text contains additional details that can be used to identify the problem.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%X25-3-X25NOCFG: Profile is not configured
```

Explanation An X.25 interface is configured to use an X.25 profile that is not configured.

Recommended Action Configure the X.25 profile by entering the **x25 profile name** global configuration command before referencing the profile.

Error Message

```
%X25-3-X25NOTAVAIL: [chars] : Lower layer protocol is not available
```

Explanation The required lower-layer service is unavailable.

Recommended Action Check your configuration or contact your Cisco technical support representative for assistance.

Error Message

```
%X25-4-XOTHOSTWRONG: Wrong host ([IP_address]) for XOT connection to [chars] PVC [dec]; expecting [IP_address]
```

Explanation An incoming XOT connection has identified a PVC that is configured for a different host IP address and whose configuration does not permit connection to a different host.

Recommended Action If the host that is attempting the connection should be allowed, either the remote host should be configured to use a single host address (by adding the **xot-source type number** option and choosing **ifc** for the *type* and *number* argument) or the local PVC should be configured to accept connections from any host (by using the **xot-promiscuous** keyword). If the host that is attempting the connection is an unauthorized one, the network administrator should take the appropriate security measures to investigate the unauthorized host.

Error Message

%X25-3-XOTINT: XOT internal error [chars]

Explanation This is a general message covering numerous internal error conditions related to XOT. The message text contains additional details that can be used to identify the problem.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show version**, **show running-config**, **show x25**, and **debug x25** commands to gather data that may help identify the nature of the error. Research and attempt to resolve the issue using the tools and utilities provided at <http://www.cisco.com/tac>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the information that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%X25-3-XOTPROTOCOL: XOT protocol error from [IP_address]: [chars]

Explanation A protocol error involving an XOT connection has been detected. The connected VC has been closed. A flaw may exist in the XOT implementation of the remote host.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-4-XOTPVCDUPLICATE: Duplicated remote PVC data for {[chars], pvc [dec]} and {[chars], pvc [dec]}

Explanation This message identifies two local XOT PVCs that are defined using duplicate specifications for the connecting remote XOT PVC.

Recommended Action The network administrator should examine the specified PVCs to determine what XOT PVC configuration is required.

XCCTSP_Voice Messages

The following are External Call Control Telephony Service Provider messages.

Error Message

```
%XCCTSP_Voice-3-ADDINTRFFAIL: The Voice Telephony Service Provider has rejected  
our \n request to add this voice interface ([dec]/[dec]:[dec])
```

Explanation The voice software was unable to report a new signaling interface to the Voice Telephony Service Provider.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCCTSP_Voice-3-MALLOC: No memory is available to build any internal data \n  
structure for the voice software.
```

Explanation The voice software was unable allocate memory to build any internal data structures. The system might be out of memory.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCCTSP_Voice-3-NOMEM: No memory is available to build the voice interface  
([dec]:[dec])
```

Explanation The voice software was unable allocate memory to build a voice interface data structure. The system might be out of memory.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%XCCTSP_VOICE-3-NOSDB: No signaling data block is available to build the \n voice interface([dec]/[dec]:[dec]) or DSP may not be present

Explanation The voice software was unable to obtain a signaling data block from the Voice Telephony Service Provider. The system might be out of memory.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%XCCTSP_VOICE-3-NOTDMCHNL: XCCTSP failed to get a free dsp tdm channel from the DSP \n Resource Manager (DSPRM) to handle an incoming call

Explanation The voice software was unable to obtain the TDM channel for a free DSP from the DSP Resource Manager. All of the DSPs have been used to process calls or have been taken out of service.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%XCCTSP_VOICE-3-NOVOICEVDEV: Cannot find the voice data block which matches \n an asynchronous response for a call.

Explanation An internal software error has occurred.

Recommended Action Contact your field service representative if this message is coincident with dropped calls. If this message is not coincident with dropped calls, copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%XCCTSP_VOICE-3-UNDEFDSX0: Undefined dsx0 interface for controller([dec])

Explanation The voice software is using a dsx0 interface for the specified controller that has not been defined. An internal software error has occurred.

Recommended Action Contact your field service representative if this message is coincident with dropped calls. If this message is not coincident with dropped calls, copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather

data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCCTSP_VOICE-3-UNDEFVOICEINTRF: Invalid voice interface  
slot/controller:group([dec]/[dec]:[dec])
```

Explanation The voice interface defined by *controller:group* keyword is not yet defined within the voice software, but attempts have been made to use this interface. An internal software error has occurred.

Recommended Action Contact your field service representative if this message is coincident with dropped calls. If this message is not coincident with dropped calls, copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

XCPA Messages

The following are Mainframe Channel Port Adapter messages.

Error Message

```
%XCPA-3-BADHWVER: bay [[dec]] pre-production hardware version detected  
(hw:[int].[int], [int].[int]).
```

Explanation The XCPA hardware major version is 0, which indicates that the hardware is preproduction. Port adapters having this hardware version were provided to EFT and beta customers. These port adapters should be upgraded.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%XCPA-3-BOOTCFG: bay [[dec]] unable to download boot configuration information.
```

Explanation After microcode was downloaded to the XCPA, an attempt was made to copy boot information into its memory. This operation has failed. The port adapter will be deactivated.

Recommended Action To reset the port adapter, you must enter the **microcode reload** command. If this error recurs, record the output from the following commands:

- **show tech**
- **dir slot0:**
- **dir slot1:**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-BOOTFAIL: bay [[dec]] [chars][chars]
```

Explanation The XCPA did not become operational after microcode was downloaded and the CPU has been taken out of reset. The message contains the reason for this error that was reported by the port adapter. The port adapter will be deactivated.

Recommended Action To reset the channel port adapter, you must enter the **microcode reload** command. If the error recurs, record the output from the following commands:

- **show tech**
- **dir slot0:**
- **dir slot1:**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-BOOTVER: bay [[dec]] incompatible microcode (boot version [int].[int] not within [int].[int] - [int].[int]).
```

Explanation An incompatibility exists between the version of the system image and the version of microcode.

Recommended Action To display the default and configured versions of microcode for this port adapter hardware type, enter the **show microcode** command. Ensure that the correct version of microcode exists in Flash memory. To load the microcode, enter the **microcode reload** command. If this error recurs, record the output from the following commands:

- **show tech**
- **show microcode**
- **dir slot0:**
- **dir slot1:**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-CKSUM_OFFSET: Invalid checksum offset: offset = [dec], length = [dec]
```

Explanation The microcode was unable to update the packet checksum. The packet will be dropped.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, call your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%XCPA-3-DEACTIVATED: bay [[dec]] deactivated
```

Explanation The XCPA is being deactivated because it has failed to successfully complete initialization. Other messages in the log will specify the exact cause of the failure.

Recommended Action If possible, correct any errors indicated by the other messages reported in the log at the time of this message. To reset the port adapter, you must enter the **microcode reload** command. If this error persists, ensure that the port adapter is properly seated in the bay. If the error still recurs, record the output from the following commands:

- **show tech**
- **dir slot0:**
- **dir slot1:**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-DMAERROR: bay [[dec]] dma error: [chars]
```

Explanation A DMA failure has occurred.

Recommended Action Reload the microcode by entering the **microcode reload** command. If the error persists, ensure that the XCPA is properly seated in the bay. If this error still recurs, record the output from the following commands:

- **show tech**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-DWNLDCKSM: bay [[dec]] checksum calculated [hex], expected [hex]
```

Explanation The calculated checksum of a section in the downloadable microcode file did not match the expected value.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCPA-3-DWNLDFAIL: bay [[dec]] download failed [chars] [chars]
```

Explanation The microcode download has failed for the reason specified in the message. The XCPA will be deactivated.

Recommended Action To reset the port adapter, you must enter the **microcode reload** command. If this error recurs, record the output from the following commands:

- **show tech**
- **dir slot0:**
- **dir slot1:**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-HWVER: bay [[dec]] incompatible microcode (hw:[int].[int], [int].[int]).
```

Explanation An incompatibility exists between the XCPA hardware and the version of microcode that the system image has attempted to load.

Recommended Action Use the **show microcode** command to display the default and configured versions of microcode for this port adapter hardware type. Ensure that the correct version of microcode exists in Flash. To load the microcode, use the **microcode reload** command. If this error still occurs, record the output from the following commands:

- **show tech**
- **show microcode**
- **dir slot0:**
- **dir slot1:**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-INITFAIL: bay [[dec]] initialization failed: [chars]
```

Explanation The XCPA driver has failed to successfully initialize the hardware on the port adapter. The port adapter will be deactivated.

Recommended Action To reset the port adapter, you must enter the **microcode reload** command. If this error persists, verify that the port adapter is properly seated in the bay. If the error still recurs, record the output from the following commands:

- **show tech**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-IPC: bay [[dec]] - [chars] (code=[[dec]])
```

Explanation An XCPA IPC error has occurred. The port adapter in the specified bay is unusable.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCPA-2-MBX. : [chars] - [dec]
```

Explanation A software program error has occurred on the Channel Port Adapter Mailbox. This could affect console support on the PA, logger messages, and configuration commands.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, call your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%XCPA-3-NOMEMORY: Out of memory trying to [chars].
```

Explanation The channel port adapter does not have sufficient memory to allocate the necessary resources.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, call your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%XCPA-4-NOCLONEPARTICLES: bay [[dec]] clone particles added by xcpa [dec],  
number of clone particles expected to be added by xcpa [dec]
```

Explanation Particle clones could not be added.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

```
%XCPA-3-NOTANALYZED: bay [[dec]] analyze failed
```

Explanation The XCPA driver has failed to successfully complete the tasks necessary for the initial bringup of the port adapter. This error is usually caused by a shortage of memory. Previous messages in the log will report the exact reason for the failure. The port adapter will be deactivated.

Recommended Action To reset the port adapter, you must enter the **microcode reload** command. If this error persists, ensure that the port adapter is properly seated in the bay. If the error still recurs, record the output from the following commands:

- **show tech**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-NOTLOADED: bay [[dec]] port adapter download and reset failed
```

Explanation The microcode driver has failed to successfully complete the necessary tasks for downloading microcode to the XCPA and bringing its CPU out of reset. Previous messages in the log will indicate the exact reason for the failure. The port adapter will be deactivated.

Recommended Action To reset the port adapter, you must enter the **microcode reload** command. If this error persists, ensure that the port adapter is properly seated in the bay. If the error still recurs, record the output from the following commands:

- **show tech**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-NOTOPER: bay [[dec]] not operational after [dec] usecs; status=[hex]
```

Explanation After a microcode download, the XCPA did not send a message indicating that it was operational within the expected time limit. The port adapter will be deactivated.

Recommended Action To reactivate the port adapter and reload the microcode, you must enter the **microcode reload** command. If this error recurs, record the output from the following commands:

- **show tech**
- **dir slot0:**
- **dir slot1:**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

%XCPA-3-OUTHUNG: [chars] - output stuck - [chars]

Explanation A transmit queue of the XCPA contained packets that had been queued for an excessive period of time. A command requesting dump information will be sent to the port adapter and then the port adapter will be reset.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%XCPA-2-PMC_TIMEOUT: PMC Timeout: poll_interval = [hex]

Explanation A timeout occurred while the channel port adapter was trying to access either memory or the channel interface.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, call your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%XCPA-3-POWEREDOFF: bay [[dec]] powered off

Explanation The XCPA has been powered off. Other messages in the log will report the cause of this event.

Recommended Action If possible, correct any errors indicated by the other messages reported in the log at the time of this message. To reset the port adapter, enter the **microcode reload** command. If this error persists, ensure that the port adapter is properly seated in the bay. If the error still recurs, record the output from the following commands:

- **show tech**
- **dir slot0:**
- **dir slot1:**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-RXQ: [chars] - consistency error - [chars] ([hex],[dec])
```

Explanation A consistency check did not receive the specified packets that were sent by the XCPA. The packets are being dropped.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCPA-3-STATUS: bay [[dec]] [chars] (code=[dec])
```

Explanation The XCPA is reporting a condition that has affected the operational status of the card. This message contains the reason for the condition that was reported by the port adapter. The port adapter will be automatically restarted.

Recommended Action If the port adapter does not automatically restart after detecting the operation status error, enter the **microcode reload** command. Whether or not the port adapter can be restarted, report this status along with the output from the following commands:

- **show tech**
- **dir slot0:**
- **dir slot1:**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-SWITCH: Driver init failed - [chars] (bay=[dec])
```

Explanation The XCPA packet switch driver initialization has failed. The channel port adapter will not be usable.

Recommended Action Record the output from the following commands:

- **show tech-support**
- **show memory**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-SWVER_MISMATCH: Incompatible switching version, unable to find version [dec].
```

Explanation The Cisco IOS and CMCC microcode versions are incompatible.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, call your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%XCPA-3-UCODEHDR: bay [[dec]] skip=[hex] hdr_ver=[hex] fw_rev=[hex]  
req_hw_ver=[hex] hw_type=[hex] description = [chars]
```

Explanation The header information in the downloadable microcode file contains incorrect information. Other messages in the log specify what information is incorrect.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCPA-3-UCODEREAD: bay [[dec]] - error reading microcode file, read=[dec],  
requested=[dec]
```

Explanation An error occurred while the XCPA was reading the microcode file. The port adapter will be deactivated.

Recommended Action To reactivate the port adapter and reload the microcode, enter the **microcode reload** command. If this error recurs, record the output from the following commands:

- **show tech**
- **dir slot0:**
- **dir slot1:**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-UCODESEC: bay [[dec]] wcs=[hex] addr=[hex] len=[hex] ep=[hex] compr=[hex]  
sec_type=[hex] ver=[hex]
```

Explanation The header information in a section of the downloadable microcode file contains incorrect information. Other messages in the log will identify the incorrect information.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCPA-3-UNEXPECTEDINT: cause_lo=[hex], cause_hi=[hex], mask=[hex],  
addr_dec_err=[hex], bus_err=[hex], ch0_ctrl=[hex]
```

Explanation An unexpected interrupt has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCPA-3-VPLDVER: bay [[dec]] incompatible microcode (vpld version [int].[int] not  
within [int].[int] - [int].[int]).
```

Explanation An incompatibility exists between the version of the system image and the version of the microcode.

Recommended Action Use the **show microcode** command to display the default and configured versions of microcode for this port adapter hardware type. Ensure that the correct version of microcode exists in Flash. Use the **microcode reload** command to load the microcode. If this error recurs, record the output from the following commands:

- **show tech**
- **show microcode**
- **dir slot0:**
- **dir slot1:**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

%XCPA-3-XCPADRIVERKILL: Unexpected request to terminate: XCPA driver process ([chars])

Explanation An unexpected termination of the XCPA driver process has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

XTAGATM Messages

The following are XTagATM messages.

Error Message

%XTAGATM-3-CONSISTENCY: [chars]

Explanation An action attempted by the XTagATM interface implementation has encountered an unexpected condition.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%XTAGATM-3-CONTROLVC: [chars]; could not create the control VC; reason [chars]

Explanation The XTagATM driver was unable to create the tag switching control VC. This error may be the result of a configuration problem or of an unexpected condition within the XTagATM driver. A TDP session cannot be established on this interface without the tag switching control VC.

Recommended Action To check for a configuration problem, ensure that the VPI and VCI values for the tag control VC lie within the range supported on the controlled switch interface that is associated with the XTagATM interface (by using the **extended-port** command in interface configuration mode). If the configuration is correct, the problem may be caused by an unexpected condition within the XTagATM driver. In this case, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%XTAGATM-3-CTLVCPVI: [chars]; VPI for control VC must be 0 or within configured range on switch

Explanation An incorrect VPI value for the tag control VC has been entered. The VPI value for the tag control VC, set by entering the **tag-switching atm vpi** command in interface configuration mode, either must be 0 or must lie within the range of VPI values that is configured for tag switching

on the controlled ATM switch. If the VPI value for the tag switching control VC is outside the appropriate range of values, the tag control VC will not be created, and the TDP session will not be established on the XTagATM interface.

Recommended Action Either reconfigure the VPI value for the tag switching control VC using the **tag-switching atm vpi** command in interface configurational mode for the TSC or reconfigure the range of VPI values available for tag switching on the controlled ATM switch. Make sure that the VPI value specified for the tag control VC is either 0 or a value that is within the configured range of VPI values available for tag switching on the controlled ATM switch.

Error Message

%XTAGATM-3-DUPEXTPORT: [chars]; mapped to the same switch interface as [chars]

Explanation Two XTagATM interfaces have been associated with a single interface, creating a duplicate binding on the controlled ATM switch. The duplicate binding will cause one of the XTagATM interfaces to remain down indefinitely.

Recommended Action To remove the duplicate binding, enter the **extended-port** interface configuration command on one of the XTagATM interfaces.

Error Message

%XTAGATM-4-NEWVCINRANGE: VC created on [chars] in range reserved for TSC (VPIs [int]-[int], VCIs [int]-[int])

Explanation A VC whose VPI or VCI is in the range configured for use by the TSC on the TSC-controlled ATM switch was just created. The TSC will be unable to create a VC with that VPI or VCI, and no data will be transmitted or received on the associated XTagATM TVC. The new VC may be on either the primary interface or a subinterface.

Recommended Action Reconfigure the new VC so that it does not fall into the range reserved for the TSC, or reconfigure the VPI/VCI range on the TSC-controlled ATM switch so that it excludes the VPI/VCI of the new VC.

Error Message

%XTAGATM-4-OLDVCINRANGE: VC exists on [chars] in range reserved for TSC (VPIs [int]-[int], VCIs [int]-[int])

Explanation An existing VC has a VPI or VCI that is in the range configured for use by the TSC on the TSC-controlled ATM switch. The TSC will be unable to create a VC with that VPI/VCI, and no data will be transmitted or received on the associated XTagATM TVC. The existing VC may be on either the primary interface or a subinterface. This message is issued only once, even if there are multiple existing VCs in the reserved range.

Recommended Action Reconfigure the existing VCs so that they do not fall into the range reserved for the TSC, or reconfigure the VPI/VCI range on the controlled switch so that it excludes the VPI/VCIs of existing VCs.

Error Message

```
%XTAGATM-3-SWITCHVPI: [chars]; switch VPI range ([dec]-[dec]) outside usable range ([dec]-[dec])
```

Explanation The VPI range that has been configured for tag switching on the TSC-controlled ATM switch does not overlap the range of VPI values that the TSC can support. This error will prevent a TDP session from being established on this interface.

Recommended Action Reconfigure the VPI range on the controlled switch so that it overlaps the range of VPI values that the TSC can support.

