

BGP Messages

The following are Border Gateway Protocol (BGP) error messages.

Error Message

```
%BGP-3-ADDRROUTE: Unable to add route for [chars] to radix trie
```

Explanation An addition to the radix trie could not be completed because an 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

```
%BGP-5-ADJCHANGE: neighbor [IP_address] [chars] [chars]
```

Explanation A BGP neighbor has either come up or gone down. The message describes the change that has occurred. This message appears only if the **log-neighbor-changes** command is configured for the BGP process.

Recommended Action This informational message normally appears as routers and BGP neighbors go up or down. However, unexpected neighbor loss might indicate high error rates or high packet loss in the network and should be investigated.

Error Message

```
%BGP-6-ASPATH: [chars] AS path [chars] received from [IP_address]: [chars]
```

Explanation The remote BGP peer has sent in an update with an invalid AS path.

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

```
%BGP-3-BADMASK: Attempt to install route for [IP_address] without valid mask in [chars]
```

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

%BGP-3-BADROUITEMAP: Bad parameters in the route-map [chars] applied for [chars]

Explanation The route map contains parameters that are incompatible with the intended operation.

Recommended Action Correct the route map definition.

Error Message

%BGP-3-BGP_INCONSISTENT: [IP_address] Inconsistent [chars]

Explanation An inconsistency in the data structures has been detected.

Recommended Action This is a rare situation and is the result of an internal problem. 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

%BGP-3-DELPATH: Attempted to delete path from an empty net for [chars]

Explanation A BGP path could not be deleted because an error was encountered.

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

%BGP-3-DELROUTE: Unable to remove route for [chars] from radix trie

Explanation A deletion from the radix trie could not be completed because an error was encountered.

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

%BGP-3-INSUFCHUNKS: Insufficient chunk pools for [chars], requested size [dec]

Explanation The size of the static chunk pools is not defined correctly.

Recommended Action Collect chunk and BGP summary information. This message probably indicates an internal problem. 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

%BGP-2-INSUFMEM: Insufficient memory for [chars] entry

Explanation The requested operation could not be accomplished because of a low memory condition.

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

Error Message

%BGP-3-MARTIAN_IP: [IP_address] Martian prefix [chars] in [chars]

Explanation An invalid IP address has been detected.

Recommended Action Verify the configuration, IP address, and prefix defined on the remote router and make any appropriate corrections.

Error Message

%BGP-3-MAXPATHS: Too many parallel paths for [IP_address][IP_netmask], maximum is [dec]

Explanation The number of parallel paths has exceeded the configured limit.

Recommended Action Increase the number of parallel paths allowed.

Error Message

%BGP-4-MAXPFX: No. of prefix received from [IP_address] (afi [dec]) reaches [dec], max [dec]

Explanation The number of prefixes received from a neighbor has reached the warning limit.

Recommended Action Verify the number of prefixes received from the neighbor and determine whether the limit should be increased.

Error Message

%BGP-3-MAXPFXEXCEED: No. of prefix received from [IP_address] (afi [dec]): [dec] exceed limit [dec]

Explanation The number of prefixes received from a neighbor has exceeded the configured limit.

Recommended Action Verify the number of prefixes received from the neighbor and determine whether the limit should be increased.

Error Message

%BGP-3-NEGCOUNTER: Prefix-accepted counter negative for peer [IP_address], prefix [chars]

Explanation The counter value for accepted prefixes is incorrect and is less than zero.

Recommended Action This is a rare situation and is a result of an internal problem. Reset the session to correct the problem.

Error Message

%BGP-6-NEXTHOP: Invalid next hop ([IP_address]) received from [IP_address]: [chars]

Explanation The remote BGP peer has sent this peer a route with an illegal next hop. The given route was ignored.

Recommended Action No action is required.

Error Message

%BGP-3-NOBITFIELD: Could not allocate bitfield. Cannot open session to [chars]

Explanation The allocation of the neighbor index for this neighbor has failed because of a low memory condition.

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

Error Message

%BGP-3-NOTIFICATION: [chars] neighbor [IP_address] [dec]/[dec] ([chars]) [dec] bytes [chars]

Explanation An error condition has been detected in the BGP session. A notification packet is being sent or received, and the session will be reset. This message appears only if the **log-neighbor-changes** command is configured for the BGP process.

Recommended Action This message represents an error in the session. Its origin should be investigated. If the error occurs periodically, 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

%BGP-3-RADIXINIT: Radix trie initialization failed

Explanation Initialization of the radix trie could not be accomplished because of a low memory condition.

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

Error Message

%BGP-5-VERSION_WRAP: bgp version wrapped of [chars]

Explanation The BGP table version has reached its maximum value and has wrapped around. The message describes this event.

Recommended Action This message is informational. However, frequent occurrences of such an event might indicate high error rates or high packet loss in the network and should be investigated.

Error Message

%BGP-4-VPNV4NH_IF: Nexthop [IP_address] may not be reachable from neighbor [IP_address] - not a loopback

Explanation A VPNv4 route is being sent to the IBGP neighbor indicated in the messages. The next hop is one of the directly connected physical interfaces. It is possible that the label for the address of the next hop is being removed in the MPLS cloud one hop too soon. Because the provider (P) routers do not store VPN information, they do not know where to forward packets that carry the BGP label. If the address is not available at the correct hop, it could break connectivity between VPN sites.

Recommended Action Use loopback interfaces as the next hops for VPNv4 IBGP neighbors.

Error Message

%BGP-4-VPNV4NH_MASK: Nexthop [IP_address] may not be reachable from neighbor [IP_address] - not /32 mask

Explanation A VPNv4 route is being sent to the IBGP neighbor. The address of the next hop is a loopback interface that does not have a /32 mask defined. OSPF is being used on this loopback interface, and the OSPF network type of this interface is LOOPBACK. OSPF advertises this IP address as a host route (with mask /32), regardless of what mask is configured. This advertising conflicts with TDP, which uses configured masks, so the TDP neighbors may not receive a tag for the route indicated in this error message. This condition could break connectivity between sites that belong to the same VPN.

Recommended Action Configure the loopback that is being used as the next-hop loopback to use a 32-bit network mask (/32), or set the network type to point-to-point by entering the **ip ospf network point-to-point** command.

BIT Messages

The following are dynamic bitlist error messages.

Error Message

```
%BIT-4-OUTOFRANGE: bit [dec] is not in the expected range of [dec] to [dec]
```

Explanation An invalid request was detected by the bit list subsystem.

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 may 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.

BRI Messages

The following are ISDN Basic Rate Interface (BRI) error messages.

Error Message

```
%BRI-1-INITFAIL: Unit [dec], initialization timeout failure, csr[dec]=[hex]
```

Explanation The hardware has failed to initialize correctly.

Recommended Action Repair or replace the controller indicated in the error message.

Error Message

```
%BRI-1-NOMEMORY: Unit [dec], no memory for [chars]
```

Explanation The requested operation could not be accomplished because of a low memory condition.

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

Error Message

```
%BRI-4-NOSWITCH: Unit [dec], initialization timeout failure, csr[dec]=[hex]
```

Explanation The ISDN leased line requires that an ISDN switch type be configured.

Recommended Action Choose and configure a BRI switch type. If you are unsure of the switch type, choose any switch.

BRIMUX Messages

The following are Cisco AS5200 BRIMUX board error messages.

Error Message

```
%BRIMUX-3-BADBRIMUX: Slot [dec] [chars]
```

Explanation A BRIMUX firmware problem may be present.

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

```
%BRIMUX-1-BADCODE: Software error: [chars]
```

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

```
%BRIMUX-3-BADDLACK: Slot [dec] BRIC, failed to acknowledge download data block [dec]
```

Explanation A BRIMUX firmware problem may be present.

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

```
%BRIMUX-3-BADDPM: Slot [dec] DPM, test failed at offset [hex], expect [hex], read [hex]
```

Explanation A BRIMUX board hardware problem may be present.

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

%BRIMUX-3-BADULADDR: Slot [dec] BRIC, wrong upload address received [hex], requested [hex]

Explanation A BRIMUX firmware problem may be present.

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

%BRIMUX-3-BADULBLK: Slot [dec] BRIC, wrong block [dec] for data upload, expect [dec]

Explanation A BRIMUX firmware problem may be present.

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

%BRIMUX-3-BADULLEN: Slot [dec] BRIC, upload data length read [dec], truncate to [dec] bytes

Explanation A BRIMUX firmware problem may be present.

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

%BRIMUX-3-BADULREQ: Slot [dec] BRIC, failed to send upload data block [dec]

Explanation A BRIMUX firmware problem may be present.

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

%BRIMUX-5-CHANUPDOWN: B[dec] of BRI[dec] on slot [dec] BRIC, changed state to [chars]

Explanation A state change has occurred on a B channel of the BRIMUX board.

Recommended Action No action is required.

Error Message

%BRIMUX-4-HEARTBEAT: Slot [dec] BRIC, lost heartbeat for [dec] seconds

Explanation A BRIMUX board hardware or firmware problem may be present.

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

%BRIMUX-5-PORTUPDOWN: BRI[dec] on slot [dec] BRIC, changed state to [chars]

Explanation A state change has occurred on a port on the BRIMUX board.

Recommended Action No action is required.

Error Message

%BRIMUX-5-UPDOWN: Slot [dec] BRIC, changed state to [chars]

Explanation A state change has occurred on the BRIMUX board.

Recommended Action No action is required.

BSC Messages

The following are Binary Synchronous Communications (BSC) protocol error messages.

Error Message

%BSC-3-BADLINESTATE: Line state Tx when receiving [chars] on line [chars]

Explanation An unexpected receive operation occurred during a transmission.

Recommended Action Verify that the line has been consistently defined in relation to the carrier. If a message report was sent, perform a hard stop and start the bisynchronous interface in question.

Error Message

%BSC-3-BADPEERTYPE: Peer [chars] is incorrect type

Explanation This message occurs only when BSC local acknowledgment is configured. It indicates that the serial interfaces that are using the BSTUN tunnel are configured incorrectly; that is, both interfaces have been configured as secondary.

Recommended Action Reconfigure the serial interfaces correctly so that they form a primary and secondary pair.

Error Message

%BSC-2-NOMEM: No buffers available on interface [chars].

Explanation Memory in the router has been exhausted.

Recommended Action Perform diagnostics on the router to locate the subsystem or interface responsible for consuming memory. The only method that will clear this situation is to reload the router.

BSTUN Messages

The following are block serial tunneling (BSTUN) error messages.

Error Message

%BSTUN-3-BADCONN: CONN: bad connection ([dec]), peer: [chars]

Explanation An internal software error has occurred. A packet was queued to the background process to establish an active connection, but the peer structure has not been initialized properly. This situation should never occur.

Recommended Action If the error message recurs, copy the 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

%BSTUN-3-BADLENOP: [chars]: bad len or unknown op, op [dec], len [dec]

Explanation An internal software error has occurred. A BSTUN packet was received on the direct interface with a length of zero, which is an abnormal length.

Recommended Action If the error message recurs, copy the 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

%BSTUN-3-BADMAGIC: [chars]: wrong magic, mine [hex], theirs [hex] ([dec])

Explanation An internal software error has occurred. The identifier from the received packet does not match the packet header information received from a peer tunnel.

Recommended Action Verify that the configuration is correct and that the peer is configured correctly and try again. If the error message recurs, copy the 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

%BSTUN-3-BADPASSIVEOPEN: passive open from [IP_address]([dec]) -> [dec] failed

Explanation An internal software error has occurred. BSTUN received notice of an incoming connection, but the connection attempt failed and the peer returned a failure code. The remote peer could be unavailable or the configuration could be incorrect.

Recommended Action Verify that both the local and remote configurations are correct and try again. If the error message recurs, copy the 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

%BSTUN-3-CONNILLSTATE: CONN: Peer [chars], illegal state [dec]

Explanation An internal software error has occurred.

Recommended Action If the error message recurs, copy the 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

%BSTUN-6-CONNOPENFAIL: CONN: peer [chars] open failed, [chars] [[int]]

Explanation An attempt to connect to a remote outbound TCP BSTUN peer was not successful.

Recommended Action Verify that the remote peer is accessible from this router, that it is running software capable of supporting BSTUN, and that it is configured correctly.

Error Message

%BSTUN-4-DUPROUTE: Cannot define duplicate route on the same group

Explanation This route command is defined on another interface belonging to the same group. Duplicate routes cannot be defined for the same group.

Recommended Action Define a new group and verify that the route information for each BSTUN route is unique.

Error Message

%BSTUN-6-ERR. : [chars]: [chars]: [chars], op [hex], len [dec]

Explanation An internal software error has occurred. The remote BSTUN partner has sent an error operation code indicating that it has detected an error on its receive processing. The sense codes are as follows:

- 0x81—The partner has received an invalid operation code. Verify that the right level of software is running to support the operation.
- 0x82—Data has been received for an unknown peer.

Recommended Action If sense code 0x82 is received, verify that the head and tail routers are configured properly. 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

%BSTUN-3-IFNOTSETUP: Could not setup interface for protocol [chars]

Explanation Even though BSTUN is configured on the interface, it could not start the interface to handle the specified protocol traffic.

Recommended Action If this message appears while you are configuring BSTUN, check for other system errors. Possible problems include a lack of available memory in the router and a shutdown. If no obvious problem can be detected, record all the displayed values and any other BSTUN error messages, copy the error messages exactly as they appear on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%BSTUN-2-NOBUF: Interface [chars], no buffer available to [chars]

Explanation A memory shortage existed at the time that the configuration command was issued. This condition is rare and, under normal conditions, is temporary.

Recommended Action Reconfigure the BSTUN group. If memory shortages persist, 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

%BSTUN-3-NOGRPDEF: No bstun group defined on interface [chars]

Explanation An action was taken that requires the previous definition of a BSTUN group number.

Recommended Action Verify that the BSTUN definitions are complete, make any necessary corrections, and try again.

Error Message

```
%BSTUN-3-NOPEER: No peer configured to route frame with destination address  
[chars] (bstun group [dec])
```

Explanation A BSTUN route has not been configured for the frame being received. The destination address of the frame is indicated in the error message. If this message appears while you are debugging BSTUN, it indicates that no specific BSTUN route has been configured for the frames being received; the device address for those frames is listed in the packet debug trace.

Recommended Action You may choose to configure a BSTUN route or ignore this message.

Error Message

```
%BSTUN-6-OPENED: [chars]: peer [chars] opened, [previous state [chars]]
```

Explanation An attempt to connect to a remote peer has been either completed successfully or is in the process of being opened. This activity indicates that BSTUN is working as expected.

Recommended Action No action is required.

Error Message

```
%BSTUN-6-OPENING: CONN: opening peer [chars], [dec]
```

Explanation An attempt to connect to a remote peer has been either completed successfully or is in the process of being opened. This activity indicates that BSTUN is working as expected.

Recommended Action No action is required.

Error Message

```
%BSTUN-6-PASSIVEOPEN: passive open [IP_address]([dec]) -> [dec]
```

Explanation An attempt to connect to a remote peer has been either completed successfully or is in the process of being opened. This activity indicates that BSTUN is working as expected.

Recommended Action No action is required.

Error Message

```
%BSTUN-6-PEERSHUTDOWN: shutting down peer [chars] on [chars]
```

Explanation A connection to a remote peer is being shut down. This is typically the result of user intervention during a BSTUN reconfiguring or disabling process. This activity indicates that BSTUN is working as expected.

Recommended Action No action is required.

Error Message

```
%BSTUN-4-PEERSTATE: Peer [chars], wrong state [dec] ([dec])
```

Explanation An internal software error has occurred.

Recommended Action If the error message recurs, copy the 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

```
%BSTUN-6-PROCEXIT: Process terminating. Due to signal [dec]. Subcode [dec].  
Address [hex].
```

Explanation The BSTUN background process is terminating.

Recommended Action If this message appears while you are disabling BSTUN, no action is required. Otherwise, record all the displayed values and any other BSTUN error messages, copy the 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

```
%BSTUN-6-RECONNECT: PHDR: reconnect from peer [chars]
```

Explanation A remote peer has reestablished a connection to this router as indicated in the error message.

Recommended Action No action is required.

Error Message

```
%BSTUN-3-SENDPUNT: [chars]: sent [chars] to [chars]
```

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

```
%BSTUN-4-SENDPUNTTCP: [chars]: sent [chars] to ([[int]])[IP_address]
```

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

```
%BSTUN-6-TCPFINI: peer [chars] closed [previous state [chars]]
```

Explanation A remote peer has closed a BSTUN connection with this router.

Recommended Action Examine the remote router to determine why it closed the connection with the specified peer. The closing of the connection can be caused by normal events, such as reconfiguration.

Error Message

```
%BSTUN-6-TCPPEERSHUT: [chars] [chars], [IP_address]([dec])
```

Explanation This router has closed a BSTUN connection with a remote peer.

Recommended Action Examine this router to determine why it closed the connection with the remote peer. This action can be caused by normal events, such as reconfiguration.

Error Message

```
%BSTUN-3-UNKPROTOEV: Unknown protocol event [dec] on interface [chars]
```

Explanation An event that was passed to the BSTUN layer for processing could not be decoded.

Recommended Action Perform a hard restart on the indicated interface.

C1400_PCI Messages

The following are protocol control information (PCI) bus error messages for the Cisco 1400 platform.

Error Message

```
%C1400_PCI-3-BADADDR: c1400_little_endian_addr: Attempted conversion of invalid address ([hex])
```

Explanation A software error occurred in trying to determine PCI device addressing.

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 may 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

```
%C1400_PCI-3-BADADDR2: c1400_big_endian_addr: Attempted conversion of invalid address ([hex])
```

Explanation A software error occurred in trying to determine PCI device addressing.

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 may 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

```
%C1400_PCI-3-BADPCIRD: PCI Configuration Read Cycle Failed for bus [dec], Device [dec], function [dec], register [dec]
```

Explanation The system could not read from the PCI Bus. It may be necessary to replace the board.

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 may 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

```
%C1400_PCI-3-BADPCIWR: PCI Configuration Write Failed for bus [dec], Device [dec], function [dec], register [dec]
```

Explanation The device initialization code was unable to write to the PCI Bus. It may be necessary to replace the board.

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 may 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

```
%C1400_PCI-3-BIG_ENDIAN_ADDR: qspan_little_endian_addr: Address ([hex]) operation is not supported
```

Explanation Conversion of an address to an equivalent big endian address is not supported by the QSpan PCI device.

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 may 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

```
%C1400_PCI-3-LITTLE_ENDIAN_ADDR: qspan_little_endian_addr: Address ([hex])
operation is not supported
```

Explanation Conversion of an address to an equivalent little endian address is not supported by the QSpan PCI device.

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 may 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

```
%C1400_PCI-3-PCI_NOT_EXIST: PCI Bus bridge does not exist
```

Explanation The device initialization code was unable to locate the PCI Bus bridge. It may be necessary to replace the board.

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 may 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.

C1600 Messages

The following are Cisco 1600 platform error messages.

Error Message

```
%C1600-4-BADINTFC: Interface [dec], (0-1 Onboard interfaces 2=WIC)
Invalid interface (Unknown, Uninitialized or Bad Cookie value read)
```

Explanation The router is functional; however, there is an interface that the software does not recognize.

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

```
%C1600-4-INTFCNOFLH: Unable to load images or communicate over interface
```

Explanation Access to the interface might have failed because of a transient network problem.

Recommended Action Retry the operation. If the problem persists, call your technical support representative for assistance.

C1700 Messages

The following are Cisco 1700 platform error messages.

Error Message

```
%C1700-3-BADIMAGE: The IOS image loaded supports voice. The platform you are running is not voice capable.\n
```

Explanation The voice-capable Cisco IOS software detects that it is running on a platform that does not support voice features.

Recommended Action Check the image and the platform. If you need to use voice features, you should get a Cisco 1750 router. If you do not need voice, you should load an image that does not include voice features.

Error Message

```
%C1700-3-BADPA: Invalid Port Adaptor type ([dec]) reported for mainboard
```

Explanation The virtual port adapter type derived from the main board type is not one of the supported types. It may be that this main board is a new main board type and the software release you are running does not support the new main board type.

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

```
%C1700-3-NOCONFIG: Could not download startup configuration from the tftp server.\n
```

Explanation A startup configuration could not be downloaded from the TFTP server. The specified file might not be available, or the server might be unreachable.

Recommended Action Check the filename and availability on the server. Verify that the network is up and the TFTP server can be reached.

Error Message

```
%C1700-1-OVERTEMP: System detected OVERTEMPERATURE condition.  
Putting the system in Power save mode and going to rommon.  
Please resolve cooling problem and restart system!\n
```

Explanation The environmental monitor has detected a high-temperature condition.

Recommended Action Verify that the room temperature is low enough and that air flow to the card is not blocked. If this condition persists, the environmental monitor might shut down the system. Contact your Cisco technical support representative for assistance if necessary.

Error Message

```
%C1700-3-TDMMODIFUNKNOWN: TDM Module does not support WAN Interface module [hex]
in slot [dec]
```

Explanation The WAN interface card was not recognized by the TDM module. Internal connections required for this WAN interface card to function were not made.

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

```
%C1700-5-WRITEMEM: NVRAM configuration is not supported.\n
```

Explanation A startup configuration could not be stored in NVRAM. It is stored in the single-board computer.

Recommended Action The configuration is automatically saved by the management application. You can also save the configuration by copying the running configuration file to a server using the FTP function.

C1700_EM Messages

The following are Cisco 1700 VPN module hardware accelerator for IP security error messages.

Error Message

```
%C1700_EM-1-ALIGN: Alignment failure on packet buffer: [hex]
```

Explanation A software error has occurred. The VPN module driver 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

```
%C1700_EM-3-BADBOOTSTATUS: VPN Module returned bad boot status: ([dec])
```

Explanation A VPN module boot sequence 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

%C1700_EM-1-BADSEMAPHORE: VPN Module cannot lock semaphore sem=[dec]

Explanation The VPN module is not responding 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

%C1700_EM-3-DOWNLOADFAIL: VPN Module firmware download failed: [chars]

Explanation An attempt to download firmware to the VPN module has failed.

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

%C1700_EM-3-DSP_NOT_RESPONDING: VPN Module DSP is not responding.

Explanation The digital signal processor (DSP) portion of the ATM address for the VPN module might be incorrect.

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

%C1700_EM-1-EM_MULTDEV: Multiple VPN Modules not supported, ([dec]) found

Explanation Multiple VPN modules are not supported in the current configuration.

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

%C1700_EM-1-EM_PROC_ALIGN: VPN Module Command Processor alignment error:
([chars]=[hex])

Explanation An alignment error has occurred in the VPN module command processor.

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

%C1700_EM-3-EM_PROC_ERR: VPN Module Command Processor error: ([chars])

Explanation A VPN module command processor 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

%C1700_EM-1-EM_PROC_INIT: VPN Module Command Processor initialization failed: ([chars])

Explanation An attempt to initialize the VPN module command processor has failed.

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

%C1700_EM-1-ERROR: [chars]

Explanation An error has occurred in an application using the VPN module.

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

%C1700_EM-1-INITFAIL: Slot [dec]: [chars]

Explanation The VPN module driver could not be initialized 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

%C1700_EM-1-MBX_BADSTATE: VPN Module CGX mailbox bad state: found=[hex], expect=[hex]

Explanation A state change has occurred, causing the VPN module CGX Library mailbox to become unstable.

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

%C1700_EM-3-MEMTESTFAIL: VPN Module failed its onboard memory test. Page [hex], Addr [hex], Wrote [hex], Read [hex]

Explanation A memory test error has occurred in the VPN module.

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

%C1700_EM-1-NOMEMORY: [chars] creation failed for slot [dec]

Explanation The VPN module driver could not allocate memory for the specified data structure.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration. If the problem is not resolved by applying these actions, 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

%C1700_EM-3-NVRAMFAIL: VPN Module could not read its own NVRAM configuration: ([dec])

Explanation An NVRAM error has occurred, preventing the VPN module from being able to read its own NVRAM configuration.

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

%C1700_EM-1-OWNER: [chars] packet buffer, pak=[hex]

Explanation A software or hardware error has occurred. The VPN module 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

%C1700_EM-3-PROC_BADEVENT: VPN Module Command Processor got event: major=[dec], minor=[dec]

Explanation An error has occurred in the VPN module command processor.

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

%C1700_EM-6-SHUTDOWN: [chars] shutting down

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

Recommended Action This is an informational message only. It occurs in normal operation.

Error Message

%C1700_EM-1-TOOBIG: [chars] received a packet with size [dec].

Explanation A packet received from the specified peer exceeds the specified MTU size.

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.

C2600 Messages

The following are Cisco 2600 platform error messages.

Error Message

%C2600-3-BADADDR: c2600_little_endian_addr: Attempted conversion of invalid address ([hex])

Explanation A software error occurred during an attempt to determine PCI device addressing.

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

%C2600-3-BADADDR2: c2600_big_endian_addr: Attempted conversion of invalid address ([hex])

Explanation A software error occurred during an attempt to determine PCI device addressing.

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

```
%C2600-3-BADBAYDEV: get_pci_dev_num: Invalid bay ([dec]) or device number offset ([dec])
```

Explanation A software error occurred during an attempt to determine PCI device addressing.

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

```
%C2600-3-BADDEVNO: pas_get_device_subunit: Invalid PCI device number: [dec]
```

Explanation A software error occurred during an attempt to determine PCI device addressing.

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

```
%C2600-3-BADNV: Detected invalid NVRAM size: [dec] bytes
```

Explanation The detected size of the NVRAM is not one of the supported sizes. The NVRAM may have failed.

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

```
%C2600-3-BADPA: Invalid Port Adaptor type ([dec]) reported for mainboard
```

Explanation The virtual port adapter type derived from the main board type is not one of the supported types. This main board may be a new type of main board that is not supported by the software release you are running.

Recommended Action Verify that the installed main board is compatible with the release of Cisco IOS software you are running. If you cannot resolve the discrepancy, 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

```
%C2600-3-BADPCIRD: PCI Configuration Read Cycle Failed for bus [dec], Device [dec], function [dec], register [dec]
```

Explanation An attempt to read the PCI bus configuration has failed. The main board needs to be replaced.

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

```
%C2600-3-BADPCIWR: PCI Configuration Write Cycle Failed for bus [dec], Device [dec], function [dec], register [dec]
```

Explanation An attempt to write the PCI bus configuration has failed. The main board needs to be replaced.

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

```
%C2600-3-NOMAC: Can't allocate MAC address for interface [int]/[int]
```

Explanation An attempt to allocate the MAC address for the specified interface has failed; all the available MAC addresses for the system have been allocated.

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

```
%C2600-3-NVERASEFAIL: Failed to erase config due to internal error
```

Explanation The password protection feature has failed to erase the configuration because of an internal error.

Recommended Action If the error message recurs, copy the 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

```
%C2600-1-OVERTEMP: System detected OVERTEMPERATURE condition.  
Putting the system in Power save mode and going to rommon.  
Please resolve cooling problem and restart system!\n
```

Explanation The environmental monitor has detected a high-temperature condition.

Recommended Action Verify that the room temperature is not too high and that air flow to the card is not blocked. If this condition persists, the environmental monitor may shut down the system. If the error message recurs, copy the 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.

C2600_MAINBOARD_ASYNC_PQUICC Messages

The following are MPC860 quad integrated communications controller error messages for the Cisco 2600 platform.

Error Message

```
%C2600_MAINBOARD_ASYNC_PQUICC-3-NOMEMORY: No memory for [chars] of unit [dec]
```

Explanation Memory cannot be allocated to perform the function indicated in the message.

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

C29ATM Messages

The following are error messages for the Catalyst 2900XL address table management module.

Error Message

```
%C29ATM-4-AT_DEBUG: [chars]: [chars] : [dec]
```

Explanation A problem with the address table management subsystem has been detected.

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

%C29ATM-4-AT_DEBUG_MAC: [chars]: [chars] : [enet]

Explanation A problem with the address table management subsystem has been detected.

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

%C29ATM-4-AT_DEBUG_TB: [chars]: [chars] : [dec]

Explanation A problem with the address table management subsystem has been detected.

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

%C29ATM-4-AT_VLAN_DEBUG: [chars]: [chars] : [dec]

Explanation A problem with the address table management subsystem has been detected.

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

%C29ATM-4-BIG_CONTROL_FRAME: AAL5 discarded because it is too large to buffer: vpi = [dec], vci = [dec], size = [dec]

Explanation An AAL5 frame destined for Cisco IOS was discarded because it was too large to buffer.

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

%C29ATM-4-IF_IDB: [chars]: [chars]

Explanation The ATM IDB for this interface could not be detected.

Recommended Action If the error message recurs, copy the 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

%C29ATM-3-NO_CREATE_VCC: Cannot create VCC [chars].

Explanation The module was unable to create a VCC for the specified service.

Recommended Action If the error message recurs, copy the 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

%C29ATM-4-NOVCINFO: [chars] discarded because it is not associated with a VCD: vpi = [dec] vci = [dec]

Explanation An OAM cell or an AAL5 frame was discarded because it was not associated with a VCD.

Recommended Action Check the configuration of your ATM switch and make any necessary corrections.

Error Message

%C29ATM-3-OUT_BAD_VCD: The module attempted to transmit frame on a closed or non-existent VCD: vcd = [dec]

Explanation The module attempted to transmit a frame on a closed or nonexistent VCD.

Recommended Action If the error message recurs, copy the 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

%C29ATM-3-OUT_OF_VCD: Cannot create VCC for [chars], run out of VCD

Explanation The module was unable to create a VCC for the specified service.

Recommended Action If the error message recurs, copy the 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.

C2KATM Messages

The following are Catalyst 2820 ATM module error messages.

Error Message

```
%C2KATM-4-BIG_CONTROL_FRAME: AAL5 discarded because it is too large to buffer: vpi = [dec], vci = [dec], size = [dec]
```

Explanation An AAL5 frame destined for Cisco IOS was discarded because it was too large to buffer.

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

```
%C2KATM-3-NO_CREATE_VCC: Cannot create VCC [chars].
```

Explanation The module was not able to create a VCC for the specified service.

Recommended Action If the error message recurs, copy the 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

```
%C2KATM-4-NOVCINFO: [chars] discarded because it is not associated with a VCD: vpi = [dec] vci = [dec]
```

Explanation An Operation, Administration, and Maintenance (OAM) cell or an AAL5 frame was discarded because it was not associated with a VCD.

Recommended Action Check the configuration of your ATM switch.

Error Message

```
%C2KATM-3-OUT_BAD_VCD: The module attempted to transmit frame on a closed or non-existent VCD: vcd = [dec]
```

Explanation The module attempted to transmit a frame on a closed or nonexistent VCD.

Recommended Action If the error message recurs, copy the 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

%C2KATM-3-OUT_OF_VCD: Cannot create VCC for [chars], no free VCDs

Explanation The module was unable to create a VCC for the specified service.

Recommended Action If the error message recurs, copy the 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.

C3600 Messages

The following are Cisco 3600 platform error messages.

Error Message

%C3600-3-BADNV: Detected invalid NVRAM size: [dec] bytes

Explanation The detected size of NVRAM is not one of the supported sizes. The NVRAM may be bad.

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

%C3600-3-BADPLAT: Unknown platform type

Explanation The Cisco IOS software image does not recognize the motherboard revision of this router. This situation could indicate either that a hardware failure has occurred or that the software needs to be upgraded to allow it to recognize newer hardware.

Recommended Action Verify that you are using a recommended revision of the Cisco IOS software for your hardware. Upgrade to a newer software release if necessary. If the error message recurs, copy the 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

%C3600-3-CHASSIS: Unknown chassis model.

Explanation Data stored in the midplane is bad or incomplete.

Recommended Action Contact your Cisco technical support representative for assistance in updating your system.

Error Message

%C3600-4-COOKIE: Corrupt or missing MAC address cookie
using random base [enet]

Explanation Data stored in the midplane is bad.

Recommended Action Contact your Cisco technical support representative for assistance in updating your system.

Error Message

%C3600-4-MACBLKSIZE: Unknown MAC address block size.

Explanation Data stored in the backplane is bad or incomplete.

Recommended Action Contact your Cisco technical support representative for assistance in updating your system.

Error Message

%C3600-3-NOMAC: Can't allocate MAC address for interface [int]/[int]

Explanation A MAC address could not be allocated because of an incorrect slot and port combination that exceeds the maximum available hardware.

Recommended Action Verify that the appropriate hardware is installed in the chassis and that the software configuration correctly reflects the slot and port placement.

Error Message

%C3600-3-NVERASEFAIL: Failed to erase config due to internal error

Explanation The password protection feature has failed to erase the configuration because an internal 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

%C3600-3-SLOTS: Number of slots in chassis is undefined.

Explanation Data stored in the midplane is bad or incomplete.

Recommended Action Contact your technical support representative for assistance in updating your system.

Error Message

`%C3600-4-VERSION_MISMATCH: Midplane data version mismatch.`

Explanation Data stored in the midplane is out of date and needs to be updated.

Recommended Action Contact your technical support representative for assistance in updating your system.

C4GWY_DSPRM Messages

The following are digital signal processor (DSP) Resource Manager error messages.

Error Message

`%C4GWY_DSPRM-5-DSPFAIL: DSP [dec] is in the failed state`

Explanation The digital signal processor for the specified address has failed because of excessive alarm indications.

Recommended Action Replace the digital signal processor resource.

Error Message

`%C4GWY_DSPRM-5-DSPNOTPRESENT: DSP [dec] is not present`

Explanation All four digital signal processor SIMMs are not available.

Recommended Action Install all four hardware digital signal processor SIMMs and try again.

Error Message

`%C4GWY_DSPRM-3-INSUFFICIENT: Insufficient DSP resources for timeslot [dec] on port [chars]`

Explanation The configuration requires more digital signal processor resources than are available.

Recommended Action Change the configuration to specify fewer used time slots. Install additional digital signal processor resources to allow for more complex configurations.

Error Message

`%C4GWY_DSPRM-5-KEEPALIVE: DSP [dec] in slot [chars], NOT RESPONDING - auto restart([dec] times)`

Explanation The digital signal processor failed the background keepalive test.

Recommended Action This message is informational. No action is required.

Error Message

%C4GWY_DSPRM-5-SETCODEC: Configured codec [dec] is not supported with this dsp image.

Explanation The coder-decoder device is unable to negotiate handoffs because it is not supported with the installed digital signal processor image.

Recommended Action Verify that the device and the Cisco IOS software image that is running in this router are compatible.

Error Message

%C4GWY_DSPRM-5-UPDOWN: DSP [dec], changed state to [chars]

Explanation A state change has occurred in the digital signal processor resource.

Recommended Action This is an informational message. No action is required.

C542 Messages

The following are voice driver for modular access routers error messages.

Error Message

%C542-3-ERROR_ANALYZE: Error analyzing the device in slot [dec].

Explanation The port module in this slot could not be recognized.

Recommended Action Power down the device, reinsert the port module, and reboot. If this message recurs, contact your technical support representative for assistance.

Error Message

%C542-3-ERROR_INIT_BLDR: [chars] Unable to download the Boot loader firmware, ret = [hex]

Explanation An error occurred during an attempt to initialize the digital signal processor with the bootloader firmware.

Recommended Action Power down the device, reinsert the port module, and reboot. If this message recurs, contact your technical support representative for assistance.

Error Message

%C542-3-ERROR_INIT_OVERLAY: [chars] Unable to download the Application overlay firmware. Status returned [hex]

Explanation An error occurred during an attempt to initialize the digital signal processor with the application or overlay firmware.

Recommended Action Power down the device, reinsert the port module, and reboot. If this message recurs, contact your technical support representative for assistance.

Error Message

%C542-1-ERROR_INTR: [chars] , Error interrupt occurred type = [hex].

Explanation The DMA engine cannot gain access to the PCI bus to read descriptors.

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

%C542-1-INCORRECT_DSP_ID: VPM at slot [dec]: Incorrect [dec] DSP-ID passed by SPI.

Explanation The DSP ID provided by the SPI for download is not valid.

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

%C542-3-INCORRECT_ID: VPM in slot [dec]: PCI device not supported.

Explanation An interface controller device did not report the correct PCI device ID.

Recommended Action Power down the device, reinsert the port module, and reboot. If this message recurs, contact your technical support representative for assistance.

Error Message

%C542-3-INCORRECT_P MID: VPM at slot [dec]: Incorrect [dec] PM-ID device not supported.

Explanation An interface controller device did not have the correct port module ID in its EEPROM cookie.

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

%C542-1-INSUFFICIENT_DSPS: VNM([dec]), cannot support all voice channels on VICs.

Explanation More voice channels are configured on the VICs than can be supported by this network module. Some channels will be inoperative.

Recommended Action This behavior is normal when a BRI VIC coexists on a VNM with an analog VIC or when a BRI VIC is on a VNM-1. If those conditions do not apply, check the part number on the VIC to determine whether it is supported in the version of Cisco IOS that is operational on the router. If you cannot resolve the discrepancy, contact your technical support representative for assistance.

Error Message

%C542-1-NO_DAUGHTER_CARD: VNM([dec]), vic card has an no known daughter cards

Explanation The Cisco IOS software does not recognize any of the VICs that are plugged into the port module.

Recommended Action Check the part number on the VIC and verify that it is supported in the version of Cisco IOS that is operational on the router. If you cannot resolve the discrepancy, contact your Cisco technical support representative for assistance.

Error Message

%C542-1-NOPCIMEMORY: VPM ([dec]/[dec]), PCI memory unavailable.

Explanation The router or access server could not allocate memory for the descriptors.

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

%C542-1-NO_RING_DESCRIPTOR: No more ring descriptors available on [dec] slot.

Explanation The C542 driver cannot queue messages for the Xilinx DMA engine to transmit.

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. Reset the digital signal processors on this port module.

Error Message

%C542-1-TOOBIG: [chars], packet(size [dec]) too big.

Explanation A packet greater than the allowed maximum size of 256 bytes was received on this interface.

Recommended Action The system should recover. No action is required. If the problem recurs, it indicates an error that might be related to data traffic patterns. 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

%C542-1-UNKNOWN_VIC: VNM([dec]), vic daughter card has an unknown id of [hex]

Explanation The software does not recognize the type of VIC daughter card that is plugged into the port module.

Recommended Action Check the part number on the VIC to see if it is supported in the version of Cisco IOS software that is operational on the router. If you cannot resolve the discrepancy, contact your technical support representative for assistance.

C54X Messages

The following are Voice over IP (VoIP) driver error messages.

Error Message

`%C54X-3-ERROR_ANALYZE: Error analyzing the device in slot [dec].`

Explanation The system does not recognize the port module in the specified slot.

Recommended Action Power down the device, reinsert the port module, and reboot. If this message recurs, contact your technical support representative for assistance.

Error Message

`%C54X-3-ERROR_INIT_BLDR: [chars] Unable to download the Boot loader firmware, ret = [hex]`

Explanation An error occurred during an attempt to initialize the digital signal processor with the bootloader firmware.

Recommended Action Power down the device, reinsert the port module, and reboot. If this message recurs, contact your technical support representative for assistance.

Error Message

`%C54X-3-ERROR_INIT_OVERLAY: [chars] Unable to download the Application overlay firmware. Status returned [hex]`

Explanation An error occurred during an attempt to initialize the digital signal processor with the application or overlay firmware.

Recommended Action Power down the device, reinsert the port module, and reboot. 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

`%C54X-1-ERROR_INTR: [chars] , Error interrupt occurred type = [hex].`

Explanation The DMA engine cannot gain access to the PCI bus to read descriptors.

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

%C54X-1-INCORRECT_DSP_ID: VPM at slot [dec]: Incorrect [dec] DSP-ID passed by SPI.

Explanation The digital signal processor ID provided by the SPI for download is not valid.

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

%C54X-3-INCORRECT_ID: VPM in slot [dec]: PCI device not supported.

Explanation An interface controller device did not report the correct PCI device ID.

Recommended Action Power down the device, reinsert the port module, and reboot. If this message recurs, contact your technical support representative for assistance.

Error Message

%C54X-3-INCORRECT_P MID: VPM at slot [dec]: Incorrect [dec] PM-ID device not supported.

Explanation An interface controller device does not have the correct port module ID in its EEPROM cookie.

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

%C54X-1-INVALID_CONFIGURATION: vpm([dec]), vic cards has an invalid configuration.

Explanation The software has detected more VIC interface ports than can be supported on this port module.

Recommended Action Check the part number on the VIC and verify that it is supported in the version of Cisco IOS software that is operational on the router. If you cannot resolve the discrepancy, 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

%C54X-1-NO_DAUGHTER_CARD: vpm([dec]), vic card has an no known daughter cards

Explanation The software does not recognize any of the VICs that are plugged into the port module.

Recommended Action Check the part number on the VIC and verify that it is supported in the version of Cisco IOS software that is operational on the router. If you cannot resolve the discrepancy, 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

%C54X-1-NOMEMORY: VPM ([dec]/[dec]), memory unavailable.

Explanation The router or access server could not allocate memory for the descriptors.

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

%C54X-1-NOPCIMEMORY: VPM ([dec]/[dec]), PCI memory unavailable.

Explanation The router or access server could not allocate memory for the descriptors.

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

%C54X-1-NO_RING_DESCRIPTOR: No more ring descriptors available on [dec] slot.

Explanation The VoIP digital signal processor driver cannot queue messages for the Xilinx DMA engine to transmit.

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. Reset the digital signal processors on this port module.

Error Message

%C54X-1-TOOBIG: [chars], packet(size [dec]) too big.

Explanation A packet greater than the allowed maximum size of 256 bytes has been received on this interface.

Recommended Action The system should recover. No action is required. If the problem recurs, it indicates an error that might be related to data traffic patterns. If you are unable to resolve the error, 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

%C54X-1-UNKNOWN_VIC: vpm([dec]), vic daughter card has an unknown id of [hex]

Explanation The software does not recognize the type of VIC daughter card that is plugged into the port module.

Recommended Action Check the part number on the VIC to verify that it is supported in the version of Cisco IOS software that is operational on the router. If you cannot resolve the discrepancy, contact your technical support representative for assistance.

C54x Messages

The following are Voice over IP (VoIP) digital signal processor (DSP) driver error messages.

Error Message

`%C54x-1-NO_RING_DESCRIPTOR: No more ring descriptors available on [dec] slot.`

Explanation The VoIP digital signal processor driver cannot queue messages for the DMA engine to transmit.

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. Reset the digital signal processors on this port module.

Error Message

`%C54x-1-TOOBIG: [chars], packet(size [dec]) too big.`

Explanation A packet greater than the allowed maximum of 256 bytes has been received on this interface.

Recommended Action If the error 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.

C5RSP Messages

The following are Cisco Catalyst 5000 platform error messages.

Error Message

`%C5RSP-6-BRIDGE_AFU: vlan [dec] could/could not be configured for bridging`

Explanation A VLAN could not be reset with the proper bridging information.

Recommended Action Try to resolve this problem by configuring the VLAN with bridging. If that does not work, try configuring the VLAN without bridging.

Error Message

`%C5RSP-3-C5_BADIPC: bad message received from the NMP`

Explanation An unsolicited in-band IPC message was received by the router from the NMP.

Recommended Action No action is required.

Error Message

%C5RSP-3-C5IP_SLOTFAIL: can't get Catalyst 5000 Slot number of router

Explanation An attempt by the RSP to query the C5IP for the slot it is plugged into has failed.

Recommended Action Reset the router from the NMP console. If the problem persists, contact your Cisco technical support representative for replacement of the C5IP line card.

Error Message

%C5RSP-3-C5_MACADRFAIL: can't get C5 Line Card Mac Addr

Explanation An attempt by the RSP to query the C5IP for VLAN 0 IP address has failed.

Recommended Action Reset the router from the NMP console. If problems persist, complete a return materials authorization for the router or the Catalyst 5000 switch. Follow the instructions for returning the equipment.

Error Message

%C5RSP-3-C5_NMPMACADRFAIL: can't get NMP Mac Addr

Explanation An attempt by the RSP to query the C5IP for VLAN 0 MAC address has failed.

Recommended Action Reset the router from the NMP console. If problems persist, contact your Cisco technical support representative to arrange for replacement.

Error Message

%C5RSP-3-C5_SAGE0FAIL: Length error occurred on dma channel 0

Explanation A hardware error has occurred on DMA channel 0.

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

%C5RSP-3-C5_SAGE1FAIL: Length error occurred on dma channel 1

Explanation A hardware error has occurred on DMA channel 1.

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

%C5RSP-3-CANT_CREATE_VLAN: vlan [dec] can not be created. media not supported

Explanation An attempt to create a VLAN of media that are not supported has failed.

Recommended Action Configure the VLAN with a different media type.

Error Message

%C5RSP-3-INVALID_LOVE_LETTER: Invalid loveletter type, [dec], sent by c5ip\n

Explanation Cisco IOS software is receiving erroneous messages from the C5IP controller.

Recommended Action If the error 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

%C5RSP-3-MAXVLAN_EXCEEDED: can't configure more than 256 VLANs

Explanation An attempt to create more than the maximum allowable number of VLANs has failed. A maximum of 256 VLANs is supported.

Recommended Action Delete unused VLANs before attempting to configure new ones.

Error Message

%C5RSP-3-NMP_DELETE_VLAN: having problems deleting vlan [dec] on the NMP

Explanation An attempt to delete a VLAN has failed.

Recommended Action Check the state of VLAN 0. Check the state of the C5IP by looking at the front-panel LED. Check the state of the NMP. Reset the router.

Error Message

%C5RSP-3-NMP_INIT_FAIL: can't talk to NMP during initialization

Explanation An attempt to initialize a VLAN has failed.

Recommended Action Check the state of VLAN 0. Check the state of the C5IP by looking at the front-panel LED. Check the state of the NMP. Reset the router.

Error Message

%C5RSP-3-NMP_PROG_FAIL: NMP won't allow vlan [dec] configuration

Explanation An attempt to create a VLAN has failed.

Recommended Action Check the state of VLAN 0. Check the state of the C5IP by looking at the front-panel LED. Check the state of the NMP. Reset the router.

Error Message

%C5RSP-6-NOSWIDB: vlan [dec] missing IDB

Explanation An internal data structure of the VLAN is missing.

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

%C5RSP-3-RSM_NMP_BRIDGE_INVALID: NMP returned invalid bridge id [dec] for [dec]\n

Explanation The NMP has returned an invalid bridge ID to the RSM.

Recommended Action Verify that the VLAN between the token ring and the bridge relay function on the RSM is configured correctly on the NMP.

Error Message

%C5RSP-3-RSM_NMP_CONFIG_MISMATCH: RSM NMP mismatch in config for [dec], RSM [dec], NMP [dec]\n

Explanation A discrepancy between the NMP and the RSM has been detected in the configuration for the specified VLAN.

Recommended Action Verify that the parameters for this VLAN are defined the same on the NMP and on the RSM.

Error Message

%C5RSP-3-UNKNOWN_NMP_PROG: unknown timer for NMP programming

Explanation An unknown timer event has expired.

Recommended Action This message is informational. No action is required.

Error Message

%C5RSP-6-VLAN_INFO_MISSING: vlan [dec] info errant. something very wrong

Explanation Internal information about the VLAN is missing.

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.

C6KENV Messages

The following are Cisco Catalyst 6000 environmental system error messages.

Error Message

`%C6KENV-4-CLOCKFAILED: clock [dec] failed`

Explanation The clock indicated in the error message has failed. The system will continue to operate, using the redundant clock.

Recommended Action Replace the failed clock.

Error Message

`%C6KENV-0-CLOCKMAJFAILED: too many clocks failed to continue system operation`

Explanation The system requires at least one clock to operate. No clocks are operational, so no packets can be forwarded.

Recommended Action Replace the clocks, backplane, or chassis.

Error Message

`%C6KENV-2-CLOCKMAJRECOVERED: enough clocks operational to continue system operation`

Explanation The system can continue operating using the recovered clock.

Recommended Action No action is required.

Error Message

`%C6KENV-4-CLOCKOK: clock [dec] operational`

Explanation A clock that had previously failed has declared itself operational.

Recommended Action No action is required.

Error Message

`%C6KENV-4-FANTRAYFAILED: fan tray failed`

Explanation One or more fans in the system fan tray have failed. Although this is a minor alarm, system components could overheat and be shut down.

Recommended Action Replace the system fan tray as soon as possible.

Error Message

`%C6KENV-4-FANTRAYOK: fan tray OK`

Explanation All fans in the fan tray are operating.

Recommended Action This message is informational. No action is required.

Error Message

%C6KENV-2-MAJORTEMPALARM: [chars] has exceeded allowed operating temperature range.

Explanation The indicated component will be powered off. For shared components, the system must be powered off.

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 may 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** output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%C6KENV-4-MAJORTEMPALARMRECOVER: [chars] has returned to allowed operating temperature range.

Explanation The indicated component has returned to the allowed temperature range, so the scheduled shutdown is canceled, and the component will continue operating.

Recommended Action This message is informational. No action is required.

Error Message

%C6KENV-4-MINORTEMPALARM: [chars] has exceeded normal operating temperature range.

Explanation The normal operating temperature range has been exceeded. This message may indicate a trend for the component, and also a trend for other components in the system.

Recommended Action Inspect the indicated component closely to determine why it is operating out of normal operating temperature range and determine whether it will eventually exceed the allowed operating temperature range. Verify that air flow to the device is not blocked and that the fan is operational.

Error Message

%C6KENV-4-MINORTEMPALARMRECOVER: [chars] has returned to normal operating temperature range.

Explanation The system has returned to normal operating condition from a previous high-temperature range.

Recommended Action No action is required.

Error Message

%C6KENV-4-PSFANFAILED: the fan in power supply [dec] has failed

Explanation The fan in the indicated power supply has failed. This condition could lead to the overheating and shutdown of the power supply.

Recommended Action Replace the power supply as soon as possible.

Error Message

%C6KENV-4-PSFANOK: the fan in power supply [dec] is OK

Explanation The fan in the indicated power supply is operating as expected and within normal temperature ranges.

Recommended Action This message is informational. No action is required.

Error Message

%C6KENV-2-SHUTDOWN: shutdown [chars] now because of [chars].

Explanation The indicated component is shut down.

Recommended Action Replace the component as soon as possible.

Error Message

%C6KENV-2-SHUTDOWN_CANCELLED: shutdown for [chars] cancelled

Explanation The situation that had caused the shutdown to be scheduled has been corrected. The shutdown has been canceled.

Recommended Action No action is required.

Error Message

%C6KENV-1-SHUTDOWN_DISABLED: need to shutdown [chars] now but shutdown action is disabled!

Explanation Automatic shutdown is disabled on this device; the system could not shut down the indicated component.

Recommended Action Manually shut down or remove the indicated component immediately.

Error Message

%C6KENV-2-SHUTDOWN_SCHEDULED: shutdown for [chars] scheduled in [dec] seconds

Explanation A major alarm condition will be corrected by shutting down the affected component.

Recommended Action Replace the component as soon as possible.

Error Message

%C6KENV-4-VTTFAILED: VTT [dec] failed

Explanation The indicated VTT has failed.

Recommended Action Replace the indicated VTT or the chassis as soon as possible.

Error Message

%C6KENV-0-VTTMAJFAILED: Too many VTT failures to continue system operation

Explanation The Cisco Catalyst 6000 backplane data bus cannot operate without proper termination provided by the VTTs.

Recommended Action Replace the failed VTTs.

Error Message

%C6KENV-2-VTTMAJRECOVERED: enough VTTs operational to continue system operation

Explanation Previously failed VTTs have begun operating again.

Recommended Action This message is informational. No action is required.

Error Message

%C6KENV-4-VTTOK: VTT [dec] operational

Explanation The indicated VTT is operational.

Recommended Action No action is required.

C6KPWR Messages

The following are Cisco Catalyst 6000 power control system error messages.

Error Message

%C6KPWR-4-DISABLED: power to module in slot [dec] set [chars]

Explanation The module in the indicated slot was powered off for the reason stated in the error message.

Recommended Action Recovery depends on the indicated reason. Using the information provided in the error message, troubleshoot and resolve the power problem. If necessary, replace defective components.

Error Message

%C6KPWR-4-ENABLED: power to module in slot [dec] set on

Explanation The module in the indicated slot was powered up.

Recommended Action This message is informational. No action is required.