

System Error Messages

AAA Accounting Messages

TACACS+ authentication, authorization, and accounting security accounting error messages

Error Message

`%AAAA-3-BADSTR: Bad accounting data: [chars]`

Explanation During AAA accounting operations, the internal database of accounting information for a user was found to be corrupt. In all cases, this indicates an internal software error, and that accounting information for a particular user session has been lost.

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

Error Message

`%AAAA-3-NULUSR: accounting for null user`

Explanation This message indicates an internal software error. During shutdown of a line or interface, the system tried to send accounting information via AAA, but could not find the user to which the accounting information belonged. The most likely reason for this error is trying to do accounting twice for the same event. This error message can occur without any loss of accounting information.

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

Error Message

%AAAA-3-RELOGIN: sanity check in re-login [chars] to [chars]

Explanation A software or hardware error occurred.

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

AIP Error Messages

ATM Interface Processor error messages

Error Message

%AIP-3-AIPFAILSETUPVC: Interface [chars], Failed to setup vc [dec]
(Cause: [chars])

Explanation The AIP driver failed to set up a virtual circuit.

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

Error Message

%AIP-3-AIPFAILSETUPVCAVG: Interface [chars], Failed to setup vc
[dec] (Cause: [chars]) Expected range [[dec] .. [dec]]Kbps for AIP
Average Rate Metering. Average Rate=Peak Rate= [dec] Kbps turns
Average Rate Metering OFF.

Explanation A software or hardware error occurred.

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

Error Message

`%AIP-3-AIPREJCMD: Interface [chars], AIP driver rejected [chars] command (error code 0x[hex])`

Explanation The AIP microcode rejected a command sent by the Route Processor (RP). The error code is the status value returned by the command.

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

ALIGN Error Messages

The ALIGN facility controls a feature in reduced instruction-set computer (RISC)-processor-based Cisco products that identifies software in need of memory use optimization.

Error Message

`%ALIGN-3-CORRECT: Alignment correction made at [hex] reading/writing [hex]`

Explanation A software component within the router needs memory optimization.

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

Error Message

`%ALIGN-1-FATAL: Illegal access to low address [hex]`

Explanation An alignment error has occurred. Alignment errors are caused by misaligned reads and writes. For example, a two-byte read of a memory address that is not a multiple of two bytes is an alignment error. Alignment errors are caused by internal software failures. The system will be reloaded, often with a bus error.

Recommended Action This message is caused by a software failure. To take advantage of recent fixes, upgrade your system to the latest Cisco IOS software release in your release train. If this message recurs, copy the error message text exactly as it appears on the console

ALIGN Error Messages

or in the system log, enter the **show log**, **show alignment** and **show tech-support** commands, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%ALIGN-3-FULL: Alignment log is full - no new entries will be recorded.
```

Explanation The router identified more software components in need of memory optimization than it can record.

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

Error Message

```
%ALIGN-3-NOMEM: Not enough memory to start alignment subsystem.
```

Explanation The router cannot start the memory performance monitoring system because not enough system memory is available for doing so.

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

Error Message

```
%ALIGN-3-SPURIOUS: Spurious memory access made at [hex] reading [hex]
```

Explanation An error was identified (and temporarily corrected) within a software component in the router.

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

Error Message

`%ALIGN-3-UNUSUAL: Unusual alignment correction at [hex] [chars]ing [hex]`

Explanation An error was identified (and temporarily corrected) within a software component in the router.

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

APPN Error Messages

Advanced Peer-to-Peer Networking error messages

Error Message

`%APPN-1-APPNALERT: [chars]`

Explanation A hardware or software error occurred.

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

Error Message

`%APPN-2-APPNCRIT: [chars]`

Explanation A hardware or software error occurred.

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

Error Message

`%APPN-7-APPNDEBUG: [chars]`

Explanation A hardware or software error occurred.

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

Error Message

%APPN-0-APPNEMERG: [chars]

Explanation A hardware or software error occurred.

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

Error Message

%APPN-3-APPNERR: [chars]

Explanation A race condition occurred between two components in the APPN software.

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

Error Message

%APPN-7-APPNETERROR: [chars]

Explanation A hardware or software error occurred.

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

Error Message

%APPN-3-APPNETLOG: [chars]

Explanation A hardware or software error occurred.

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

Error Message

%APPN-6-APPNINFO: [chars]

Explanation A hardware or software error occurred.

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

Error Message

%APPN-6-APPNLOGMSG: [chars]

Explanation A hardware or software error occurred.

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

Error Message

%APPN-5-APPNNOTICE: [chars]

Explanation A hardware or software error occurred.

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

Error Message

%APPN-7-APPNSENEVENT: [chars]

Explanation A hardware or software error occurred.

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

Error Message

%APPN-6-APPNSENDMSG: [chars]

Explanation A hardware or software error occurred.

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

Error Message

%APPN-5-APPNSENDREQ: [chars]

Explanation A hardware or software error occurred.

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

ARAP Error Messages

Error Message

%APPN-4-APPNWARNING: [chars]

Explanation A hardware or software error occurred.

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

Error Message

%APPN-7-MSALERT: Alert [chars] issued with sense code [hex] by [chars] APPN_COMPLAIN_IVL

Explanation An alertable condition occurred in the local node.

Recommended Action Refer to “Detailed Alert” section of the *IBM Systems Network Architecture Management Services Reference* (order number SC30-3346) for a description of ALERTID. Also refer to the “Sense Data” section of *IBM Systems Network Architecture Formats* (order number GA27-3136) for a description of SENSE_CODE. Report this message to your technical support representative.

ARAP Error Messages

Apple Remote Access protocol error messages

Error Message

%ARAP-3-ABORTED: TTY [dec]: arap callback aborted

Explanation An unexpected message was received during the Microcom Networking Protocol version 4 (MNP4) link setup.

Recommended Action Report this error to your technical support representative.

Error Message

```
%ARAP-6-ADDRFREE: TTY [dec]: ARAP ended for user [chars]; address [atalk_address]
```

Explanation This message appears only when ARA protocol logging is configured. The message notes that an ARA protocol user has logged out.

Recommended Action No action is required.

Error Message

```
%ARAP-6-ADDRUSED: TTY [dec]: ARAP started for user [chars]; address [dec].[dec]
```

Explanation This message appears only when ARA protocol logging is configured. The message notes that an ARA protocol user has logged in.

Recommended Action No action is required.

Error Message

```
%ARAP-3-BADCONFIG: TTY [dec]: unhandled configuration command
```

Explanation A configuration command was not recognized.

Recommended Action Check the configuration file on the server for any invalid configuration commands.

Error Message

```
%ARAP-6-BADEXIT: TTY [dec]: exited user [chars] [chars]
```

Explanation A user was disconnected from ARA protocol at an unexpected time. The disconnection may be due to modems dropping, server error, client problems, or any number of other difficulties.

Recommended Action To determine the cause of the disconnection, correlate the receipt of this message with the user problem reports.

Error Message

`%ARAP-3-BADPAK: TTY [dec]: Bad packet type in arap_send_msg`

Explanation Internal data structures are corrupted.

Recommended Action Check for abnormally high CPU usage.

Error Message

`%ARAP-4-CONFAILED: TTY [dec] ARAP connection failed: [chars]`

Explanation The ARA protocol client was denied access, probably due to a configuration problem on the server. The error message should indicate the problem. This message does not indicate access denials due to bad passwords.

Recommended Action Investigate the problem reported in the error message.

Error Message

`%ARAP-4-GETBUFFER: getbuffer failed: size [dec]: [chars]`

Explanation The ARA protocol could not obtain a buffer for an incoming packet.

Recommended Action Examine buffer usage statistics. More memory might be required.

Error Message

`%ARAP-5-INITCONFUSED: TTY [dec]: ARAP unexpected initialization packet [chars]`

Explanation The startup negotiation between a client and the ARA protocol server fell out of order. If this message is received sporadically, it indicates line noise.

Recommended Action If this message recurs, reinstall the ARA client software.

Error Message

%ARAP-4-NOEXTTACACS: TTY [dec]: arap TACACS is configured but extended TACACS is not.

Explanation Terminal Access Controller Access Control System (TACACS) authentication failed because extended TACACS is not configured.

Recommended Action Configure extended TACACS.

Error Message

%ARAP-3-NOMEM: TTY [dec]: ARAP session failed; no memory

Explanation ARA protocol failed to run because it could not allocate enough memory for its internal data structures.

Recommended Action Run **show mem** for details of memory usage. You probably need to install more memory.

Error Message

%ARAP-5-PAKINVALID: TTY [dec] : ARAP invalid packet received

Explanation A corrupted packet reached the ARA protocol code.

Recommended Action Check for excessive CPU usage or excessive line noise.

Error Message

%ARAP-4-TIMEOUT: TTY [dec]: arap expected message timeout

Explanation The software timed out during the MNP4 link setup.

Recommended Action Report this error to your technical support representative.

AT Error Messages

AppleTalk error messages

Error Message

```
%AT-6-ACQUIREMODE: [chars]: AppleTalk port  
initializing; acquiring [chars]
```

Explanation The port is determining the correct configuration. This message is generated when discovery mode is enabled and no other router is detected.

Recommended Action Informational message only. No action required.

Error Message

```
%AT-5-ADDRINUSE: [chars]: AppleTalk node warning;  
address [atalk_address] already in use
```

Explanation The initial hint address was in use. A search will be made for a valid address.

Recommended Action Notification message only. No action required.

Error Message

```
%AT-5-ADDRINVALID: [chars]: AppleTalk node warning; address  
[atalk_address] is invalid
```

Explanation The hint address specified for the port was not valid for its current configuration.

Recommended Action No action required; the hint is ignored and a random valid hint is automatically computed.

Error Message

```
%AT-6-ADDRUSED: [chars]: AppleTalk node up; using  
address [atalk_address]
```

Explanation No hint address or a bad hint address was specified. This message indicates which AppleTalk address will be used.

Recommended Action Informational message only. No action required.

Error Message

```
%AT-2-ASSERTFAILED: AppleTalk assertion failed: [chars]
```

Explanation The software detected an inconsistency. Although this error is serious, the router attempts to continue. AppleTalk processing can be impaired.

Recommended Action Record the entire message and note any AppleTalk problems you experience. Give this information to your technical support representative in a problem report.

Error Message

```
%AT-5-BADNEIGHBOR: [chars]:AppleTalk neighbor ignored;  
[node] is misconfigured
```

Explanation A neighboring router's AppleTalk configuration does not agree with this router's AppleTalk configuration. This condition can result from a mismatch between the neighbor's network range and this router's network range.

Recommended Action Modify either this router's or the neighboring router's configuration so that the network ranges agree.

Error Message

```
%AT-6-BADROUTE: Route to [atalk_net] has gone bad.
```

Explanation The system did not detect a route within the required timeout period. Therefore, the route is marked as bad. This can mean that a network has become unreachable for some reason—perhaps a broken connection. This message does not necessarily reflect an error condition.

Recommended Action Informational message only. No action required.

Error Message

%AT-7-BUGREPORT: AppleTalk Bug: [chars]

Explanation The software detected an unexpected condition. The router takes corrective action and continues.

Recommended Action Copy the error message exactly as it appears and note any AppleTalk problems you experience. Contact your technical support representative for assistance.

Error Message

%AT-3-CANTDEL: Cannot delete [chars] route [dec] by clearing; please remove by reconfiguration

Explanation The user attempted to remove a route from the routing table with the command **clear appletalk route**. The command failed because the route was directly connected (that is, it was created by a configuration command).

Recommended Action Remove the route by reconfiguring the directly connected interface with which it is associated.

Error Message

%AT-5-COMPATERR1: [chars]: AppleTalk internet compatibility mode required by [node]

Explanation A neighboring router only supports extended AppleTalk networks with a cable range of 1 and with one assigned zone, for example, 25-25.

Recommended Action Upgrade routers that can support only the original AppleTalk specification, and observe the compatibility rules in the interim.

Error Message

```
%AT-5-COMPATERR2: AppleTalk neighbor incompatibility;  
[atalk_net] has multiple zones
```

Explanation Although this router has neighbors that require your internetwork to observe compatibility rules, AppleTalk has learned of a route with multiple zone names defined. This condition can cause inconsistencies for nodes in your internetwork.

Recommended Action Upgrade routers that can support only the original AppleTalk specification, and observe the compatibility rules in the interim.

Error Message

```
%AT-5-COMPATERR3: AppleTalk neighbor incompatibility;  
[atalk_net] has wide cable-range
```

Explanation Although this router has neighbors that require your internetwork to observe compatibility rules, AppleTalk has learned of a route that has a wide (greater than 1) cable range. This condition can cause inconsistencies for nodes in your internetwork.

Recommended Action Upgrade routers that can support only the original AppleTalk specification, and observe the compatibility rules in the interim.

Error Message

```
%AT-5-COMPATERR4: AppleTalk EIGRP neighbor incompatibility; [node]  
has same router ID [dec]
```

Explanation A hardware or software error occurred.

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

Error Message

```
%AT-6-CONFIGOK: [chars]: AppleTalk port enabled; verified [node]
```

Explanation The AppleTalk configuration was verified by consulting the indicated router.

Recommended Action Informational message only. No action required.

Error Message

```
%AT-6-CPUPIG: AppleTalk CPU piggie info: just spent [dec] ms. without  
schedule
```

Explanation A hardware or software error occurred.

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

Error Message

```
%AT-7-DEBUGMSG: AppleTalk Debug: [chars]
```

Explanation This message is generated by a **debug** command to provide additional information about a condition in AppleTalk.

Recommended Action If you experience problems in AppleTalk, show these messages to your technical support representative.

Error Message

```
%AT-3-DEFZONEERR: [chars]: AppleTalk port warning;  
default zone differs with [node]
```

Explanation This message is generated during the verification startup process when there is a disagreement between the default zone (the first zone defined after the **appletalk cable-range** command) and the router that confirmed the configuration. When an AppleTalk end node is first connected to a network, it joins this default zone until it is overridden.

Recommended Action Correct the configuration so that all routers are advertising the same default zone. Note that several router implementations are known to mismanage the default zone.

Error Message

```
%AT-6-DELROUTE: AppleTalk network deleted;  
[atalk_net] removed from routing table
```

Explanation A route aged out of the AppleTalk internetwork.

Recommended Action Informational message only. No action required.

Error Message

%AT-5-DISCOFF: [CHARS]: AppleTalk node warning; discovery mode disabled

Explanation A hardware or software error occurred.

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

Error Message

%AT-3-DOMLOOP: LOOP Detected on Domain [dec] [[chars]]

Explanation A routing loop was detected by the domain router.

Loops are not allowed; however, a loop detection process running in the background of the domain router tries to spot a loop situation. Whenever a domain router gets a new zone list from one of the domains that is identical to one in the main routing table and the length of the network range matches, it starts a loop detection process.

A loop detection process sends several AppleTalk loop packets, which are NBP packets of type “LoopBack”. When a loop packet is received on the interface that does not belong to the original domain, the domain router shuts off all the domains, and subsequently all the interfaces in these domains, which are involved in the loop.

Loop detection may not catch all types of loops. It is the responsibility of the user to make sure that no loop exists.

Recommended Action Disable the cause of the routing loop. Restart the interfaces involved.

Error Message

%AT-3-DOMOVERFLOW: Remap Range OVERFLOW for [chars] Domain [dec]

Explanation The remap range overflowed. If a network (range) cannot fit inside the remapping range, then it is not accepted until more remapping room is available. When overflow occurs, all interfaces in the domain are disabled.

Recommended Action Increase the remapping range. Restart the interfaces.

Error Message

%AT-5-DUPADDR: [chars]: AppleTalk port restarting;
node address taken by [enet]

Explanation Another AppleTalk node on a common network interface claimed the same AppleTalk address that this router was using. This error indicates a serious, unexpected problem. If it recurs, a physical network problem in which the nodes cannot hear each other may exist.

Recommended Action This router will restart AppleTalk processing on the common network interface to resolve the address conflict. No action required.

Error Message

%AT-6-EIGRPLINKDN: AT/EIGRP Link Down: [chars]

Explanation A hardware or software error occurred.

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

Error Message

%AT-6-EIGRPLINKUP: AT/EIGRP Link Up: [chars]

Explanation A hardware or software error occurred.

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

Error Message

%AT-6-EIGRPLOG: EIGRP Logging: [chars] from [atalk_address] ([dec])
on [chars] for network [atalk_net], metric [dec] / [dec]

Explanation A hardware or software error occurred.

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

Error Message

%AT-4-EIGRPLOTSOWORK: AT/EIGRP WorkQ processed [dec] entries, required [dec] ms. we did[chars] suspend

Explanation A hardware or software error occurred.

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

Error Message

%AT-6-EIGRPPEERDN: AT/EIGRP Peer Down: [atalk_address], router ID: [dec], just lost on [chars]

Explanation A hardware or software error occurred.

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

Error Message

%AT-6-EIGRPPEERUP: AT/EIGRP Peer Up: [atalk_address], router ID: [dec], newly heard on [chars]

Explanation A hardware or software error occurred.

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

Error Message

%AT-5-FDDICOMPAT: AppleTalk FDDI neighbor [atalk_net] using obsolete FDDI addressing

Explanation Another router on an FDDI ring running AppleTalk is running a release of the router software previous to 9.0(2). Routers running software releases earlier than 9.0(2) use an encapsulation for AppleTalk on FDDI rings that is not compatible with the Apple FDDITalk preliminary proposal.

Recommended Action Notification message only. No action required.

Error Message

```
%AT-3-IFCONFLICT: [chars]: AppleTalk port disabled;  
conflicts with port [chars]
```

Explanation An attempt was made to configure an interface to have the same or a conflicting AppleTalk address or cable range as another interface on the same router.

Recommended Action Verify that you are not specifying an AppleTalk address or cable range used previously on this router, and reconfigure the interface.

Error Message

```
%AT-5-INTCLEARED: [chars]: AppleTalk port restarting;  
interface cleared
```

Explanation This message is generated by performing the EXEC command **clear interface** on an interface currently routing AppleTalk.

Recommended Action Notification message only. No action required.

Error Message

```
%AT-5-INTDOWN: [chars]: AppleTalk node down; Line  
protocol down
```

Explanation An AppleTalk hardware interface was disabled because of a bad serial line, a configuration command, or a bad interface.

Recommended Action If the port was not intentionally disabled, this message can reflect a hardware problem. If so, repair or replace the controller.

Error Message

```
%AT-5-INTRESTART: [chars]: AppleTalk port restarting;  
protocol restarted
```

Explanation This message is generated when a configuration change necessitates resetting the hardware interface. AppleTalk reinitialized the port.

Recommended Action Notification message only. No action required.

Error Message

%AT-6-INTUP: [chars]: AppleTalk port restarting;
Line protocol came up

Explanation An AppleTalk port that was previously shut down was restarted.

Recommended Action Informational message only. No action required.

Error Message

%AT-3-INVNBPCMD: Invalid NBptest command '[chars]'

Explanation An unrecognized command was given in the Name Binding Protocol (NBP) test facility.

Recommended Action Enter a valid command.

Error Message

%AT-5-LOSTNEIGHBOR: [chars]: AppleTalk neighbor down;
lost contact with [node]

Explanation A peer router is unreachable.

Recommended Action Notification message only. No action required.

Error Message

%AT-3-MACIPBADCONF: ZONE-NAME: MacIP inoperable
configuration, X.X.X.X

Explanation If the **appletalk event-logging** command is configured, this message appears on the console when a MacIP server cannot begin or recover operations because of an invalid IP address configuration. This condition only occurs when the configured MacIP server's IP address is not valid on the same cable of any operable IP interface. An AppleTalk zone of the MacIP server replaces ZONE-NAME. The MacIP server's configured IP address replaces X.X.X.X.

When this error occurs, the MacIP configuration is considered invalid and is deleted.

Recommended Action Advisory message. No action required.

Error Message

%AT-6-MACIPDOWN: ZONE-NAME: MacIP server shutting down, X.X.X.X

Explanation If the **appletalk event-logging** command is configured, this message appears on the console when a MacIP server is no longer operational for any reason. MacIP servers shut down in response to MacIP configuration changes or errors, or a change in the condition or configuration of an AppleTalk or IP interface for which the MacIP server is providing service. An AppleTalk zone of the MacIP server replaces ZONE-NAME. The MacIP server's configured IP address replaces X.X.X.X.

Recommended Action Informational message only. No action required.

Error Message

%AT-3-MACIPNOCABLE: ZONE-NAME: MacIP inoperable IP interface, X.X.X.X

Explanation If the **appletalk event-logging** command is configured, this message appears on the console when a MacIP server can no longer operate due to a change in the condition of the IP interface it serves. This condition can occur if IP routing is shut down on the interface, or the IP address of the interface is changed so that the MacIP server's IP address is no longer valid on the same cable. An AppleTalk zone of the MacIP server replaces ZONE-NAME. The MacIP server's configured IP address replaces X.X.X.X.

Recommended Action Advisory message only. No action required.

Error Message

%AT-6-MACIPUP: ZONE-NAME: MacIP server operational, X.X.X.X

Explanation If the **appletalk event-logging** command is configured, this message appears on the console when a MacIP server is fully initialized and is ready to accept client requests. An AppleTalk zone served by the MacIP server replaces ZONE-NAME. The MacIP server's configured IP address replaces X.X.X.X.

Recommended Action Informational message only. No action required.

Error Message

```
%AT-3-MCMISMATCH: [chars]: AppleTalk port warning;  
zone multicast differs with [node]
```

Explanation A computed multicast address disagrees with that provided by another AppleTalk router. The other AppleTalk router may be misconfigured or faulty.

Recommended Action Correct the problem at the other router.

Error Message

```
%AT-6-NBRDELETED: Neighbor entry for [atalk_net] has  
been deleted
```

Explanation This message is displayed upon successful completion of the EXEC command **clear appletalk neighbor**.

Recommended Action Informational message only. No action required.

Error Message

```
%AT-6-NEIGHBORUP: [chars]: AppleTalk neighbor up;  
[node] has restarted
```

Explanation A neighboring router to which this router previously lost connectivity reappeared on the network.

Recommended Action Informational message only. No action required.

Error Message

```
%AT-3-NETDISAGREES: [chars]: AppleTalk port disabled;  
network incompatible with [node]
```

Explanation The port was disabled because the configured AppleTalk address or cable range on the interface conflicts with another router on the attached network.

Recommended Action Reconfigure the applicable routers.

Error Message

```
%AT-4-NETINVALID: [chars]: AppleTalk node down; conflicts with  
active internet
```

Explanation The configuration specified for the interface conflicts with the active AppleTalk internetwork. For example, a cable range is configured so that it overlaps an existing route but does not match the entry exactly.

Recommended Action Reconfigure the port so that it is consistent with the existing internetwork or take any other actions necessary to resolve the conflict. AppleTalk will periodically attempt to restart the port.

Error Message

```
%AT-6-NEWNEIGHBOR: [chars]: AppleTalk neighbor added;  
[node] is operational
```

Explanation The router discovered a new AppleTalk router.

Recommended Action Informational message only. No action required.

Error Message

```
%AT-6-NEWROUTE: [chars]: AppleTalk network added;  
[atalk_net] via [node] ([dec] hop[char])
```

Explanation A new AppleTalk route has been learned. The message includes the source of the route and its distance in hops.

Recommended Action Informational message only. No action required.

Error Message

```
%AT-6-NEWZONE: AppleTalk zone added; zone [chars] defined
```

Explanation A new AppleTalk zone has been created.

Recommended Action Informational message only. No action required.

Error Message

%AT-3-NOADDRSAVAIL: [chars]: AppleTalk node down; no addresses available

Explanation No free node could be found on the interface.

Recommended Action If fewer than 250 nodes reside on your AppleTalk network, call your technical support representative. Otherwise, you must split your AppleTalk network into smaller networks.

Error Message

%AT-3-NOBESTPATH: Could not compute best path for network [atalk_net]

Explanation A path to the specified network could not be found.

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

Error Message

%AT-6-NODEWRONG: [chars]: AppleTalk node [atalk_address] misconfigured; reply has been broadcast

Explanation An AppleTalk node sent a GetNet Info request to this router specifying an invalid network number for the source of the GetNet Info request. This situation occurs when an AppleTalk end node is moved between networks and is therefore misconfigured for the current network.

Recommended Action Informational message only. No action required.

Error Message

%AT-1-NOMEM: Could not allocate memory for [chars] at line [dec] in [chars]

Explanation An internal software error occurred.

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

Error Message

```
%AT-6-NOPROXY: AppleTalk proxy deleted; zone [chars]
freed network [atalk_net]
```

Explanation A previously configured Name Binding Protocol (NBP) proxy was deleted. The router can no longer convert NBP requests to a format understood by routers that support only the original specification of AppleTalk.

Recommended Action Informational message only. No action required.

Error Message

```
%AT-3-NORROUTE: No route to destination [atalk_address]
```

Explanation The router could not deliver a packet to a destination because it did not know where to send it.

Recommended Action If the destination is valid, you must determine why the router does not know the route (that is, the neighboring router may be withholding information).

Error Message

```
%AT-3-NOSRCADDR: [chars]: AppleTalk packet error;
no source address available
```

Explanation An attempt to generate an AppleTalk packet from the router failed because no valid AppleTalk source address is available to identify this router in the packet.

Recommended Action Configure a port to have an address or cable range and verify that the port is operational.

Error Message

```
%AT-3-NOSUCHNBR: No such neighbor, [atalk_net]
```

Explanation The user tried to execute the EXEC commands **show appletalk neighbor** or **clear appletalk neighbor** with a nonexistent neighbor address.

Recommended Action Specify a valid neighbor address, that is, one that appears in the output of the **show appletalk neighbor** command with no arguments.

Error Message

%AT-5-NOSUCHROUTE: No such route [dec]

Explanation The user tried to execute the EXEC commands **show appletalk route** or **clear appletalk route** with a nonexistent route.

Recommended Action Specify a valid route, that is, one that appears in the output of the **show appletalk route** command with no arguments.

Error Message

%AT-3-NOTRUNNING: AppleTalk not running

Explanation You tried to show or change the AppleTalk configuration when AppleTalk routing was not turned on.

Recommended Action Issue the **appletalk routing** configuration command prior to issuing any other AppleTalk configuration or display command.

Error Message

%AT-5-NOTSUPPORTED: [chars]: AppleTalk node down;
line protocol not supported

Explanation The specified interface has an encapsulation method that does not support AppleTalk.

Recommended Action Notification message only. No action required.

Error Message

%AT-3-NOVIRTUAL: [chars]: Client tried to connect, but no virtual network is declared

Explanation A hardware or software error occurred.

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

Error Message

%AT-5-OLDMCI: [chars]: AppleTalk route cache disabled; firmware is obsolete

Explanation The firmware on the MCI controller card does not support AppleTalk fast switching.

Recommended Action No corrective action is required. Normal AppleTalk operation is permitted, but the fast switching cache is disabled for the associated port. If unexpected, verify that the MCI controller firmware for the interface specified in the error message is at level 1.7 or higher.

Error Message

%AT-6-ONLYROUTER: [chars]: AppleTalk port enabled; no neighbors found

Explanation No other AppleTalk routers were found on the network attached to the port.

Recommended Action Informational message only. No action required.

Error Message

%AT-6-OUTOFSYNC: [chars]: AURP connection out of sync...terminating

Explanation A hardware or software error occurred.

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

Error Message

%AT-6-PATHADD: [chars]: AppleTalk [chars] path to network [atalk_net] added; via [node] (metric [dec])

Explanation A new AppleTalk path has been learned. The message includes the source of the path, its distance in hops, its metric, and the type of path.

Recommended Action Informational message only. No action required.

Error Message

%AT-5-PATHCHANGE: Route to [atalk_net] is now using path of type [chars] on [chars] via [node]

Explanation The path to a network changed either because the old path went down or the new path was better.

Recommended Action Notification message only. No action required.

Error Message

%AT-6-PATHDEL: AppleTalk [chars] path to [atalk_net] via [node] has been deleted

Explanation A path aged out of the AppleTalk network.

Recommended Action Informational message only. No action required.

Error Message

%AT-6-PATHNOTIFY: [chars]: AppleTalk [chars] path to [atalk_net] down; reported bad by [node]

Explanation A router went down somewhere on the AppleTalk network. The specified peer notified this router of the change.

Recommended Action Informational message only. No action required.

Error Message

%AT-4-PATHREJECTED: AURP path [atalk_net] rejected; conflict detected

Explanation A hardware or software error occurred.

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

Error Message

```
%AT-6-REGPENDING: NBP registration of [chars]@[chars] pending
```

Explanation A name registration call is being performed.

Recommended Action Informational message only. No action required.

Error Message

```
%AT-6-ROUTEDOWN: [chars]: AppleTalk network down;  
port to [atalk_net] disabled
```

Explanation A connected route is being advertised as *down* (also known as *notify neighbor*) because the configured port is no longer operational.

Recommended Action Informational message only. No action required. If unexpected, correct the situation that caused the port to be disabled.

Error Message

```
%AT-6-ROUTENOTIFY: [chars]: AppleTalk network down; [atalk_net]  
reported bad by [node]
```

Explanation A router went down somewhere on the AppleTalk network. The specified peer notified this router of the change.

Recommended Action Informational message only. No action required.

Error Message

```
%AT-6-ROUTEOK: [chars]: AppleTalk network up;  
[atalk_net] via [node] ([dec] hop[char])
```

Explanation A routing update was received for a previously suspect route.

Recommended Action Informational message only. No action required.

Error Message

%AT-5-RTMPSTATE: [chars]: [chars] RTMP Path to [atalk_net] via [node] now in [chars] state (metric [dec])

Explanation The state of a path changed.

Recommended Action Informational message only. No action required.

Error Message

%AT-3-SUBROUTINE_ERROR: AppleTalk error: [chars]

Explanation An internal error occurred that violates a programming assertion in the AppleTalk networking module.

Recommended Action Save the text of the message, the output of the **show version** command, and a copy of the router configuration file. Call your technical support representative for assistance.

Error Message

%AT-3-ZONEDISAGREES: [chars]: AppleTalk port disabled;
zone list incompatible with [node]

Explanation The configurations of one or more other routers are inconsistent with the configuration of this router.

Recommended Action Reconfigure the routers so they are all consistent.

Error Message

%AT-6-ZONEGC: AppleTalk zone deleted; zone [chars]
released

Explanation The router purged an unused zone from the zone table.

Recommended Action Informational message only. No action required.

Error Message

```
%AT-6-ZONEPROXY: AppleTalk proxy defined; zone [chars]
using network [atalk_net]
```

Explanation This message reports the zone name and network number that are being advertised to support the **appletalk nbp-proxy** command.

Recommended Action Informational message only. No action required. One message is generated for each configuration command when proxy service is initiated.

ATM Error Messages

Asynchronous Transfer Mode error messages

Error Message

```
%ATM-3-FAILCREATEVC: ATM failed to create VC(VCD=[dec], VPI=[dec],
VCI=[dec]) on Interface [chars], (Cause of the failure: [chars])
```

Explanation This message can occur for the following unrelated reasons. Each reason is accompanied by a recommended action.

- The virtual circuit descriptor (VCD) exceeded the maximum available memory.
 - Use a smaller VCD number.
- Address Resolution Protocol (ARP) is allowed only on AAL5-SNAP virtual circuits.
 - Change the encapsulation to AAL5SNAP.
- The virtual path identifier-virtual channel identifier (VPI-VCI) pair, or the VCD is already in use.
 - Try using a different VPI-VCI or VCD number.
- Only one virtual channel connection (VCC) is allowed on a point-to-point interface.
 - Try using a different subinterface.
- AAL3/4-SMDS virtual circuit must be the only virtual circuit on an interface.
 - Turn off AAL3/4.

- AAL3/4-SMDS multiplex ID exceeds the maximum.
 - Try a smaller multiplex ID value.
- Switched Multimegabit Data Service (SMDS) is not enabled.
 - Enable SMDS.
- The driver failed to accept the virtual circuit.
 - Try initiating the virtual circuit again.

Recommended Action If none of the previous actions fix the problem, copy the error message exactly as it appears and report it to your technical support representative.

Error Message

```
%ATM-4-MTUCALLMISMATCH: Incoming call from [ATM NSAP] has a
mismatched maximum transmission unit - incoming forward PDU size is
[dec], backward PDU size is [dec], interface [chars] MTU size is
[dec][chars]
```

Explanation The calling or called party has a maximum transmission unit (MTU) size configured that is different from the MTU size on the current interface.

Recommended Action Either change the configured MTU size on the current interface to that of the caller's or called party's interface, or change the caller's or called party's interface to match the current interface.

Error Message

```
%ATM-4-NOMEM: Failed to allocate memory--[chars], ONEMIN
```

Explanation The system attempted to allocate some memory but failed.

Recommended Action Reduce the RAM usage or add more RAM to your router.

BGP Error Messages

Error Message

`%ATM-3-UNSUPPORTED_QOS_PARMAS:ATM failed to create VC on Interface [ATM int], (Cause of the failure Invalid traffic shaping parameters or out of rate queues.`

Explanation The system attempted to create a virtual circuit (VC) with traffic shaping parameters not supported by the hardware.

Recommended Action Either change the requested traffic shaping parameter to one that the hardware supports, or use existing parameters to avoid the need for a new rate queue.

BGP Error Messages

Border Gateway Protocol error messages

Error Message

`%BGP-6-ASPATH: Invalid AS path [chars] received from [int]: [chars], 5*ONESEC`

Explanation A software or hardware error occurred.

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

Error Message

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

Explanation An internal software error occurred.

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

Error Message

%BGP-6-NEXTHOP: Invalid next hop ([inet]) received from [inet]:
[chars], 5*ONESEC

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

Recommended Action This is an informational message only. The remote peer may be misconfigured.

Error Message

%BGP-3-NOMEMORY: No memory for [chars] entry, resetting

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-RADIXINIT: Radix tree initialization failed

Explanation Initialization of the radix tree 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.

BRI Error Messages

ISDN Basic Rate Interface error messages

Error Message

```
%BRI-3-BADENCAP: Unit [dec], bad encapsulation in idb->enctype = [hex]
```

```
%BRI-3-BADUNIT: Bad unit number [dec]
```

Explanation An internal software error occurred.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

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

Explanation The hardware failed to initialize correctly.

Recommended Action Repair or replace the controller.

Error Message

```
%BRI-0-NOMEMORY: Unit [dec], no memory for [chars]
```

```
%BRI-1-NOMEMORY: msgtxt_nomemory
```

Recommended Action 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-3-ODDSTART: Interface [chars]`

Explanation An internal software error occurred.

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

Error Message

`%BRI-3-OUTENCAP: Unit [dec], bad output packet encapsulation: [hex]`

Explanation An internal software error occurred.

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

Error Message

`%BRI-3-OWNERR: Unit [dec], buffer ownership error`

Explanation An Ethernet interface is malfunctioning, or an internal software error occurred.

Recommended Action Repair or replace the malfunctioning controller.

BSC Error Messages

Binary Synchronous Communications (Bisync) protocol error messages

Error Message

`%BSC-3-BADLINESTATE: Line state Tx when receiving non-Tx event:
[dec].`

Explanation An unexpected receive occurred during a transmission.

Recommended Action Verify that the line has been consistently defined in regards to the carrier. If a message report was sent, perform a hardware reset on the bisynchronous interface in question.

BSTUN Error Messages

Error Message

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

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

Recommended Action Reconfigure the serial interfaces correctly to be a primary and secondary pair.

Error Message

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

Explanation This message indicates that memory in the router was 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 Error Messages

Block serial tunneling error messages

Error Message

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

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

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

%BSTUN-3-BADMAGICTCP: [chars]: peer [chars], wrong magic, min [hex], theirs [hex]

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

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

Explanation An internal software error occurred.

Recommended Action If any of these messages recur, call your technical support representative for assistance.

Error Message

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

Explanation An attempt to connect to a remote TCP BSTUN peer failed.

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

Explanation An internal software error occurred.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

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, temporary.

Recommended Action Reconfigure the BSTUN group. If memory shortages persist, call your technical support representative for assistance.

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 Make sure that the **encapsulation bstun** and **bstun group** commands have been used to define BSTUN encapsulation and the BSTUN group for the interface.

Error Message

`%BSTUN-3-NOPROTMEM: No memory for BSTUN protocol definition of [chars]`

Explanation The system does not have sufficient memory to define a new BSTUN schema.

Recommended Action This error message should only print when the router is critically short of memory. Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

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

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

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

Explanation A connection attempt to a remote peer completed successfully (OPENED, PASSIVE-OPEN) or is in the process of being opened (OPENING). This is good, expected behavior.

Recommended Action Informational message only. No action 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 in BSTUN reconfiguration or disabling. This is good, expected behavior.

Recommended Action Informational message only. No action required.

Error Message

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

Explanation An internal software error occurred.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

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 unconfiguring BSTUN, no action is required. Otherwise, record all the displayed values and any other BSTUN error messages, and contact your technical support representative.

Error Message

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

Explanation A remote peer reestablished a connection to this router.

Recommended Action Informational message only. No action required.

Error Message

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

`%BSTUN-3-SENDPUNTTCP: [chars]: sent [chars] to ([[dec]]) [inet]`

Explanation An internal software error occurred.

Recommended Action If either message recurs, call your technical support representative for assistance.

Error Message

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

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

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

Error Message

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

Explanation This route closed a BSTUN connection with a remote peer.

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

Error Message

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

Explanation A non-decodeable event was passed to the BSUTN layer for processing.

Recommended Action Perform a hardware restart on the indicated interface.

CBUS Error Messages

CiscoBus controller error messages

Error Message

```
%CBUS-3-AIPCFG: Interface [chars], Cannot config interface, AIP MEM  
[hex], status [dec]
```

```
%CBUS-3-AIPINVPLIM: Interface [chars], Invalid PLIM detected.  
Interface downed
```

```
%CBUS-3-AIPRSET: Interface [chars], Error ([hex])  
[chars] - aip_reset()
```

```
%CBUS-3-AIPRSETU: Unit [dec], Error ([hex]) [chars] - aip_reset()
```

Explanation A software error occurred.

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

Error Message

```
%CBUS-4-BADENCAPSZ: [chars]: CIP encapsulated msg size ([dec])  
exceeds max ([dec])
```

Explanation An encapsulated control message from the CIP had a size greater than the maximum expected size. The message was truncated.

Recommended Action Copy the error message exactly as it appears and copy down the router's configuration along with any other relevant information. Contact your technical support representative for assistance.

Error Message

```
%CBUS-3-BIGBUF:Controller [dec], Error [hex], Big Buffers [dec]
```

Explanation A hardware or software error occurred.

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

Error Message

%CBUS-3-BUFFER: Controller [dec], Error ([hex]), Buffer size = [dec], Buffer pool = [dec], number [dec]

Explanation An internal software error occurred.

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

Error Message

%CBUS-3-CBUSBCE: Failed to select a BCE, response [hex] - cbus_bce_update_ifa()

Explanation A hardware or software error occurred.

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

Error Message

%CBUS-3-CBUSBCEPERM: Failed to select a BCE, response [hex] - cbus_bce_permissions_update()

Explanation A hardware or software error occurred.

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

Explanation

%CBUS-3-CCBCMDFAIL0: Controller [dec], cmd ([dec]) failed ([hex]-[hex])

Explanation A command sent from the system to an interface processor failed to complete successfully.

Recommended Action The system recovered by generating an error code to the requester.

Error Message

%CBUS-3-CCBCMDFAIL1: Controller [dec], cmd ([dec] 0x%-08x) failed (0x%-04x)

Explanation A command sent from the system to an interface processor failed to complete successfully.

Recommended Action The system recovered by generating an error code to the requester.

Error Message

%CBUS-3-CCBPTIMEOUT: CCB handover timed out, CCB [hex], slot [dec]

Explanation A hardware or software error occurred.

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

Error Message

%CBUS-3-CCBREPLY: [chars]: bad CCB reply [hex]

Explanation A hardware or software error occurred.

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

Error Message

%CBUS-4-CIPADPTCHNG: Interface [chars], adapter changed from [chars] to [chars]

Explanation The port adapter on the CIP interface reported a different interface type than it previously did, which should not happen without your removing the CIP and reinstalling it.

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

Error Message

`%CBUS-3-CIPCFGFAIL: [chars]: configuration command [chars] [chars] failed`

Explanation A configuration command sent to the CIP after a reset failed to complete successfully.

Recommended Action Reissue the configuration command.

Error Message

`%CBUS-3-CIPDTRFAIL: [chars]: Channel-protocol [chars] command failed; resetting to default.`

Explanation The **channel-protocol** configuration command sent to the CIP after a reset failed to complete successfully.

Recommended Action The channel data transfer rate was reset to the default value. Reissue the configuration command.

Error Message

`%CBUS-3-CIPENCAP: [chars]: No elements available for message ([hex] [hex])`

Explanation An encapsulated control message arrived from the CIP, but no elements were available to receive it. The Route Processor (RP) or the RSP will reset the interface.

Recommended Action Copy the error message exactly as it appears and copy down the router's configuration along with any other relevant information. Contact your technical support representative for assistance.

Error Message

`%CBUS-3-CIPNOPREQ: [chars]: Unable to pre allocate response element; cfg not sent.`

Explanation An attempt to allocate a buffer for the CIP configuration response, or for the configuration state change request, was unsuccessful. The configuration request was not sent to the CIP.

Recommended Action The configuration command must be reissued.

Error Message

```
%CBUS-3-CIPRSET: Interface [chars], Error ([hex]) [chars]  
cip_reset()
```

Explanation The Channel Interface Processor (CIP) did not respond to a reset request from the route processor.

Recommended Action

Try each of the following fixes in sequence. If a fix corrects the problem, there's no need to perform the tasks which follow it.

- 1 Clear the interface using the **clear interface** command.
- 2 Mic reload.
- 3 Reseat the CIP.

If the error still occurs, copy the error message exactly as it appears. Record the output from the following commands:

- **show contr cbus**
- **show version**
- **show interface**
- **write term**
- **show running-config**

Record any of the other log messages that surround the CIPRSET message. Provide this information to your technical support representative.

Error Message

```
%CBUS-3-CMD: Cmd failed: [chars], response %#04x, [chars]
```

Explanation A software or hardware error occurred.

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

Error Message

%CBUS-3-CMDTIMEOUT: Cmd timed out, CCB [hex], slot [dec], cmd code [dec]

Explanation A software or hardware error occurred.

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

Error Message

%CBUS-3-CORRUPT: Controller [dec], wrote [hex], read [hex], loc [hex] - dci_memtest()

Explanation A hardware component failed an internal diagnostic test.

Recommended Action Replace the malfunctioning device.

Error Message

%CBUS-3-CTRACHECK: Unit [dec], Adapter Check Error ([hex] [hex] [hex] [hex])

Explanation The Token Ring monitor firmware detected a fatal error on the interface card.

Recommended Action Issue a **clear interface** command. If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

%CBUS-3-CTRCMDFAILED: Unit [dec], CTR Command [hex] Failed, [char] ([hex])

Explanation A command from the system to the Token Ring interface failed to complete.

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

Error Message

%CBUS-3-CTRCMDFAILED2: Unit [dec], CTR Command [hex] Failed, Code [hex]

Explanation A hardware or software error occurred.

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

Error Message

%CBUS-3-CTRINIT: Unit [dec], CTR Initialization Failed - [char]

Explanation The Token Ring interface failed its internal self-tests.

Recommended Action Issue a **clear interface** command. If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

%CBUS-3-CTRLRCMDFAIL0: Controller [dec], cmd ([dec]) failed ([hex]-[hex]) count ([dec])

Explanation A command sent from the system to an interface processor failed to complete successfully.

Recommended Action The system recovered by generating an error code to the requester.

Error Message

%CBUS-3-CTRLRCMDFAIL1: Controller [dec], cmd ([dec] [hex]-[hex]) failed ([hex]-[hex]) count ([dec])

Explanation A command sent from the system to an interface processor failed to complete successfully.

Recommended Action The system recovered by generating an error code to the requester.

Error Message

%CBUS-3-CTRLRINITERR: Controller [dec], Error [hex], cdb [hex]
[chars] - cbus_init()

Explanation A hardware or software error occurred.

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

Error Message

%CBUS-3-CTRRAMTEST: Unit [dec], RAM Addressing Test
Failed - [char]

Explanation The Token Ring interface failed its memory diagnostic tests.

Recommended Action Issue a **clear interface** command. If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

%CBUS-3-CTRRESET: Unit [dec], Error (%-04x) [char] -
cbus_token_reset()

Explanation The Token Ring interface failed to complete a command that is part of the reset sequence.

Recommended Action Issue a **clear interface** command. If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

%CBUS-3-CTRUCHECK: Unit [dec], Microcode Check Error

Explanation The CTR microcode detected an unrecoverable error.

Recommended Action Issue a **clear interface** command. If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

```
%CBUS-3-DAUGHTER: Unit [dec], daughter controller [dec]
failed [chars] test - interface disabled
```

Explanation A hardware component failed an internal diagnostic test. Test output and descriptions of ranges follow.

```
Unit [dec] (ranges 0-14):
```

Indicates the Multibus jumper setting for the ciscoBus controller, or in the Cisco 7000, a slot number.

```
daughter controller [dec] (ranges 0-3):
```

Indicates the ciscoBus relative slot number (0 to 3, or in the Cisco 7000, 0 to 4) of the daughter card that failed the test.

```
failed [chars] test ([chars]= memd read, memd write):
```

If the failed test was *memd read*, the processor was able to write to shared ciscoBus buffer memory from the ciscoBus registers, but was unable to read back that memory through special commands to the daughter card.

If the failed test was *memd write*, writes to the memory device through the daughter card were not verified successfully with reads through the ciscoBus controller.

The daughter card under test responds successfully to some commands (otherwise the software would have received a DAUGHTER_NO_RSP message), but its memory device tests failed. The daughter card must be able to write to some memory device addresses; otherwise, it cannot respond to any commands.

Recommended Action First check that the daughter controller card is properly seated in its Multibus and ciscoBus connectors. Next, swap daughter cards and check whether the error follows the daughter card or the slot. If the message recurs, call your technical support representative for assistance.

Error Message

%CBUS-3-DAUGHTER_NO_RSP: Unit [dec], daughter [dec],
not responding [hex] - disabled

Explanation A hardware component failed an internal diagnostic test. Test output and descriptions of ranges follow.

Unit [dec] (ranges 0-14):

Indicates the Multibus jumper setting for the ciscoBus controller.

daughter controller [dec] (ranges 0-3):

Indicates the ciscoBus relative slot number (0 to 3, or in the Cisco 7000, 0 to 4) of the daughter card that failed the test.

The daughter card's hardware was recognized across the ciscoBus backplane, but the daughter card did not respond to the first command issued to it.

This condition is a result of one of the following: the daughter card did not reset, or the microcode on the card is in a hung state, or the card cannot fully communicate across the ciscoBus backplane (cannot read or write shared MEMD or does not get the MALU_ATTENTION signal across the ciscoBus).

Recommended Action First, make sure that the daughter card is properly seated in its Multibus and ciscoBus connectors. If this action does not solve the problem, call your technical support representative.

Error Message

%CBUS-3-FCICMDFAIL0: Controller [dec], cmd ([dec]) failed (0x%-04x)
count ([dec])

Explanation A command sent from the system to an interface processor failed to complete successfully.

Recommended Action The system recovered by generating an error code to the requester.

Error Message

```
%CBUS-3-FCICMDFAIL1: Controller [dec], cmd ([dec] 0x%-08x) failed
(0x%-04x) count ([dec])
```

Explanation A command sent from the system to an interface processor failed to complete successfully.

Recommended Action The system recovered by generating an error code to the requester.

Error Message

```
%CBUS-3-FDDIRSET: Interface [chars], Error ([hex])
[chars] -fddi_reset()

%CBUS-3-FDDIRSETU: Unit [dec], Error ([hex])
[chars] - fddi_reset()
```

Explanation A hardware device did not respond appropriately to a request.

Recommended Action Make sure the device is functioning and is configured correctly.

Error Message

```
%CBUS-3-FSIPRSET: Interface [chars], Error ([hex]) [chars] -
fsip_reset()
```

Explanation A Fast Serial Interface Processor (FSIP) did not respond to a reset request from the route processor.

Recommended Action Check FSIP electrical connections, cable, and ciscoBus connections. An FSIP microcode reload will be required. If the check of electrical connections reveals no problems and the message recurs, call your technical support representative for assistance.

Error Message

%CBUS-3-GHOST: Attempted operation on missing hardware [chars] - [chars]

Explanation A hardware or software error occurred.

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

Error Message

%CBUS-3-HSSIRSET: Interface [chars], Error ([hex]) [chars] - hssi_reset()

%CBUS-3-HSSIRSETU: Unit [dec], Error ([hex]) [chars] - hssi_reset()

Explanation A hardware component did not respond to a reset command.

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

Error Message

%CBUS-3-INITERR: Interface [dec], Error ([hex]) [chars] - cbus_init()

Explanation The switch processor or ciscoBus controller signaled an error while processing a packet or selecting an interface. This indicates a software problem.

Recommended Action Call your technical support representative.

Error Message

%CBUS-3-INTR: Interface [dec], idb [hex] [dec] [chars] - cbus_interrupt()

Explanation The switch processor or ciscoBus controller returned a nonsensical value.

Recommended Action Call your technical support representative.

Error Message

`%CBUS-4-INTR Interface [dec], [chars] - cbus_interrupt()`

Explanation A hardware device did not respond appropriately to a request.

Recommended Action Make sure the device is functioning and is configured correctly.

Error Message

`%CBUS-3-MEC_OUTHUNG: Interface [chars] output hung, [hex], [chars], [chars]`

Explanation Output hung on a ciscoBus Ethernet interface.

Recommended Action Correct any problems with the Ethernet cable, then manually re-enable the port.

Error Message

`%CBUS-3-MIPSTAT: Out of buffers--losing status information for the MIP card`

Explanation This ERROR results from CPU starvation, typically caused by heavy fast switching activity. The counts displayed for the MultiChannel Interface Processor (MIP) card are incorrect.

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

Error Message

`%CBUS-3-MODULE: Missing [chars] for [chars]`

Explanation A hardware or software error occurred.

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

Error Message

`%CBUS-3-NOBUF: Buffer allocation failure: [chars]`

Explanation A hardware or software error occurred.

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

Error Message

`%CBUS-4-NOCOOKIE: [chars]-[dec] controller missing
configuration data - disabled`

Explanation The controller type was derived from a hardware probe. The controller number indicates the ciscoBus relative slot number. This is a hardware error

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

Error Message

`%CBUS-3-NOMEMORY: No memory for [chars]`

Explanation The requested operation could not be accomplished because of a low memory condition or an unseated card in the Cisco 7000.

Recommended Action Reduce other system activity to ease memory demands. Confirm that all cards are properly seated. If conditions warrant, upgrade to a larger memory configuration.

Error Message

`%CBUS-3-OUTHUNG: [chars]: tx%c output hung (%-04x - [chars]),
[chars]`

Explanation A transmission attempt on an interface failed. The interface might not be attached to a cable or there might be a software problem.

Recommended Action Check that the interfaces are all connected to the proper cables. If that is not the problem, call your technical support representative.

Error Message

```
%CBUS-4-OUTHUNG: Interface [chars] output hung,  
restarting cBus[dec] controller - mci_output()
```

Explanation A ciscoBus controller took too long to respond to a command and was restarted by software.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance. You might need to repair or replace the controller.

Error Message

```
%CBUS-3-POLLFAIL: Interface [chars] failed to respond, debug info  
follows
```

Explanation A Token Ring interface card failed to respond to periodic polling. This can indicate a software or hardware problem.

Recommended Action Copy the debugging information exactly as it appears and report it to your technical support representative. See CBUS-3-POLLFAILDAT for the syntax of this message.

Error Message

```
%CBUS-3-POLLFAILDAT: Int [dec]: [hex] [hex] [hex] [hex] [hex] [hex]
```

Explanation This is the debugging information for the CBUS-3-POLLFAIL error.

Recommended Action Copy the debugging information exactly as it appears and report it to your technical support representative.

Error Message

```
%CBUS-3-PORTTYPE: Unexpected interface type for [chars][dec], port  
[dec], type [dec]
```

Explanation A hardware or software error occurred.

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

Error Message

`%CBUS-4-RSETFAIL: Interface [chars] failed to reset properly in [chars], code [hex]`

Explanation An interface reset command failed. This may be a software or hardware problem.

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

Error Message

`%CBUS-3-RESETNXI: Reset of removed interface [hex] ([chars])`

Explanation An interface reset was attempted on an interface that was removed from the router. This message appears if you use the **shutdown** command to bring down a removed interface.

Recommended Action Informational message only. No action required.

Error Message

`%CBUS-3-SELECT: Select error, slot [dec], port [dec], error [dec]`

Explanation A hardware or software error occurred.

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

Error Message

`%CBUS-3-TESTFAIL: Unit [dec], failed [chars] test - interface disabled`

Explanation A hardware component failed an internal diagnostic test.

Recommended Action Check switch settings on the interface cards. Check for proper unit numbers. Reset the cards. Replace the malfunctioning device.

Error Message

```
%CBUS-3-TXALLOC: Error ([hex]) tx_allocate -  
cbus_init()
```

Explanation A hardware device did not respond appropriately to a request.

Recommended Action Make sure the device is functioning and is configured correctly.

Error Message

```
%CBUS-3-UNKENC: Interface [chars], unknown encaps type [hex],  
15*ONESEC
```

Explanation A packet was received from the CIP with an unknown encapsulation type. The packet will be dropped.

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

CCP Error Message

Point-to-point Compression Control Protocol error message

Error Message

```
%CCP-4-NOBUF: Interface [chars] [chars]
```

Explanation Compression requested a new data buffer for decompressing into and was refused, due to none being available for this interface.

Recommended Action Use the **buffers** configuration command to increase the number of buffers available on the interface that this occurred. This should prevent a repeat. An example of the commands you execute follows:

```
YourBox#  
YourBox#conf t  
YourBox(config)#  
YourBox(config)#buffers bri 0 max-free 12
```

CI Error Messages

Chassis Interface (CI) (Cisco 75xx platform environmental monitor card) error messages

Error Message

```
%CI-3-BLOWER: Blower [dec] failure
```

Explanation One of the router's cooling fans failed.

Recommended Action Replace the fan as soon as possible or the router may shut itself down or fail to operate properly.

Error Message

%CI-1-BLOWSHUT: Blower failure, shutdown in [dec] seconds

Explanation One of the six blowers in a five-slot chassis has failed. Because each blower cools a separate region of the cards in the chassis, all blowers are needed for router operation. If a blower failure persists for 2 minutes, the router will shut itself down and will need to be power cycled.

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

Error Message

%CI-6-BPLANE: CI type [dec] differs from NVRAM type [dec]

Explanation The chassis type as reported by the chassis interface is different from that programmed into NVRAM.

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

Error Message

%CI-4-COND: Restarting with [dec] recent soft power failures

Explanation A soft power failure —also called a soft shutdown—occurs when the router shuts itself down because it has detected an overheating condition. When the temperature increases past the “board shutdown” trip point, the cards are shutdown but the power supplies, fans, and chassis interface continue to run.

If the system then cools past the restart trip point, the system restarts. The system counts the number of soft shutdowns and decreases its soft reset counter accordingly from its maximum value to prevent the cycle from repeating indefinitely. If the counter reaches zero, the system undergoes a hard shutdown, which requires a power cycle to recover from. The soft shutdown counter is reset to its maximum value after the system has been up for 6 hours.

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

Error Message

%CI-3-CTRLRTYPE: Wrong controller type [hex]

Explanation The CI was manufactured incorrectly.

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

Error Message

%CI-2-ENVCRIT: [chars] measured at [chars]

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

Recommended Action Correct the specified condition or the router may shut itself down or fail to operate properly.

Error Message

%CI-4-ENVWARN: [chars] measured at [chars]

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

Recommended Action Closely monitor the condition and correct if possible. If the situation worsens, call your technical support representative for assistance.

Error Message

%CI-3-NO_HSA: HSA not supported in this release, please remove one RSP2

Explanation Two Route Switch Processors (RSPs) are installed in the chassis. The software can support only one RSP.

Recommended Action Remove one of the RSPs.

Error Message

%CI-3-NOACK: [chars] acknowledge failure, cmd [hex], addr [hex], data [hex]

Explanation The CI software failed to communicate with the CI hardware.

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

Error Message

%CI-4-NOTFOUND: Chassis Interface not found

Explanation The system software could not detect the presence of a CI card.

Recommended Action Verify that the CI card is correctly installed in the backplane. If the error recurs, call your technical support representative for assistance.

Error Message

%CI-6-PSCHANGE: Power supply [dec] changed from [chars] to [chars]

Explanation The CI reported that a power supply was either installed, removed, or changed.

Recommended Action If the situation does not correspond with a physical change in the system's power supplies, call your technical support representative for assistance.

Error Message

%CI-3-PSFAIL: Power supply [dec] failure

Explanation One of the router's power supplies failed.

Recommended Action Replace the failed power supply as soon as possible.

CLEAR Error Message

Error Message

`%CI-3-SLOTCOMP: Inconsistent slot [hex]`

Explanation The CI software detected a possible inconsistency in the CI hardware.

Recommended Action Confirm that the CI card is correctly and fully installed in the backplane. If error recurs, call your technical support representative for assistance.

CLEAR Error Message

Clear error message

Error Message

`%CLEAR-5-COUNTERS: Clear counter on [chars] [chars] by [chars]`

Explanation A hardware or software error occurred.

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

CLNS Error Messages

OSI Connectionless Network Service error messages

Error Message

`%CLNS-5-ADJCHANGE: [chars] Adjacency to <neighbor id> (<interface>)
<Up/Down>, <reason>`

Explanation An Intermediate System-to-Intermediate System (ISIS) or NetWare Link Services Protocol (NLSP) adjacency with a neighboring router has either come up or gone down. The message describes the change and the reason for it. This message appears only if **log-adjacency-changes** command is configured for the ISIS or NLSP process.

Recommended Action This message is primarily informational and appears normally as routers and links go up or down. Unexpected adjacency loss might indicate high error rates or high packet loss in the network and should be investigated.

Error Message

%CLNS-4-AREALOST: Too many IS-IS areas--can't route to area [chars]

Explanation Intermediate System-to-Intermediate System (ISIS) allows only three area addresses per area. Multiple routers with at least one area address in common merge all of their configured area addresses into a single set. If the resulting set more than three area addresses, this message appears and indicates that there will be a loss of connectivity to the specified area.

Recommended Action Reconfigure the network so that the area has fewer area addresses, or split the area into multiple areas.

Error Message

%CLNS-4-BADPACKET: [chars]: [chars], [chars] from [chars] ([chars])

Explanation A hardware or software error occurred.

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

Error Message

%CLNS-1-BKUPERR: ISIS: [chars] in [hex], ndb_next [hex], ndb_prev [hex], lsp_next [hex], lsp_prev [hex], metric [hex], index [dec], [chars] [hex]

Explanation An internal error occurred in the maintenance of the Intermediate System-to-Intermediate System (ISIS) backup route table.

Recommended Action Copy the error message exactly as it appears and copy down the router's configuration along with any other relevant information. Contact your technical support representative for assistance.

Error Message

%CLNS-4-CKSUMERR: [chars]: L[dec] LSP [chars] database checksum error, restarting

Explanation A hardware or software error occurred.

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

Error Message

%CLNS-4-EDATFAIL: Encapsulation failed, dst= [chars]

%CLNS-4-EESHFAIL: Interface [chars], encapsulation of ESH failed, HLEN [dec]

Explanation Either message can occur when an interface is down and a static neighbor entry exists in the system's CLNS routing table. If this is not the case, the message indicates an internal software error.

Recommended Action Check the interface. If the interface is not down and no static neighbor entry exists for that interface, call your technical support representative for assistance.

Error Message

%CLNS-1-LINKERR: ISIS: [chars] in [hex], lsp_next [hex], lsp_prev [hex], index [dec], ver [dec], [chars] [hex]

Explanation An internal error occurred in the maintenance of Intermediate System-to-Intermediate System (ISIS) or NetWare Link Services Protocol (NLSP) link-state packet (LSP) linkages.

Recommended Action Copy the error message exactly as it appears and copy down the router's configuration along with any other relevant information. Contact your technical support representative for assistance.

Error Message

%CLNS-3-LSPCHAIN: [chars]: non-null [chars] pointer [hex] on freed LSP, index [dec]

Explanation An internal error occurred in the Intermediate System-to-Intermediate System (ISIS) or NetWare Link Services Protocol (NLSP).

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

Error Message

%CLNS-4-LSPCKSUM: ISIS: Bad <level> LSP <LSP ID> checksum received on <interface>, bad count <error count>

%CLNS-4-LSPCKSUM: NLSP: Bad <level> LSP <LSP ID> checksum received on <interface>, bad count <error count>

Explanation A link-state packet (LSP) was received for either Intermediate System-to-Intermediate System (ISIS) or NetWare Link Services Protocol (NLSP), which failed an internal data checksum, but which passed the data-link checksum. The interface on which the LSP was received is indicated, along with the total count of checksum errors received, the LSP ID, and the level of the failing LSP. This message usually indicates data corruption occurring on a link, but might also indicate data corruption in memory in a neighboring router.

Recommended Action If the error is in a neighboring router's memory, the problem will correct itself within 15 minutes. That router will detect its internal error and regenerate the corrupted data. This case is usually indicated by a single LSP ID appearing repeatedly in these messages. The same LSP ID might appear in this message on other routers as well.

If data-link corruption has caused the error, check the link for errors and deal with them appropriately. This case is usually indicated by a number of different LSP IDs appearing in these messages.

Error Message

%CLNS-3-LSPDB: [chars]: Inconsistent LSPiX entry, lsp [hex], index [dec], ixentry [hex], ixentry->lsp [hex]

Explanation An internal error occurred in the Intermediate System-to-Intermediate System (ISIS) or NetWare Link Services Protocol (NLSP).

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

Error Message

%CLNS-4-LSPFULL: [chars]: L[dec] LSP filled to capacity, dropping routes, 10*ONEMIN

Explanation A hardware or software error occurred.

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

Error Message

%CLNS-3-LSPiXARRMATCH: [chars]: LSPiX entry [dec] mismatch with LSP [hex], LSP [chars] is [dec], entry [dec]

Explanation An internal error occurred in the Intermediate System-to-Intermediate System (ISIS) or NetWare Link Services Protocol (NLSP).

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

Error Message

%CLNS-3-LSPIXARRNULL: [chars]: LSPix entry [dec] should be null, is [hex]

%CLNS-3-LSPIXHEAD: [chars]: LSPix [chars] [dec] head [hex] doesn't match first prev [hex]

Explanation An internal error occurred in the Intermediate System-to-Intermediate System (ISIS) or NetWare Link Services Protocol (NLSP).

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

Error Message

%CLNS-4-LSPTOOBIG: [chars]: L[dec] LSP [chars] size [dec] bigger than interface [chars] MTU [dec], LSP dropped, 10*ONEMIN

Explanation A software or hardware error occurred.

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

Error Message

%CLNS-3-NSAPES: Invalid NSAP type in ES table: [hex] for [chars]

%CLNS-4-NSAPIS: Invalid NSAP type in IS table: [hex] [dec]

%CLNS-4-REDIRECT: Redirect found for non-route entry, dst= [chars], next-hop= [chars]

Explanation An internal software error occurred.

Recommended Action If the message recurs, call your technical support representative for assistance.

Error Message

%CLNS-3-ONLIST: [chars]: entry already threaded, prev [hex], next [hex], index [dec], ver [dec]

Explanation An internal error occurred in the Intermediate System-to-Intermediate System (ISIS) or NetWare Link Services Protocol (NLSP).

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

Error Message

%CLNS-4-TENT: [chars]: [chars]

Explanation An internal error occurred in the Intermediate System-to-Intermediate System (ISIS) or NetWare Link Services Protocol (NLSP).

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

CLS Error Message

Cisco Link Services error message

Error Message

%CLS-3-CLSFAIL: CLS: Assertion failed: [chars]

Explanation A software or hardware error occurred.

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

CLSDR Error Messages

Cisco Link Services driver error messages

Error Message

%CLSDR-3-ERRRTN: [chars] failed error [hex]

Explanation An error was returned from Cisco Link Services I (CLSI) to the destination logical unit (DLU) because CLSI did not perform the action desired by the DLU.

Recommended Action Refer to CLSI software documentation for more information about this error. Report this error to your technical support representative.

Error Message

%CLSDR-3-INCORRECTPORT: Incorrect port pointer in USapId

Explanation Cisco Link Services I (CLSI) returned an incorrect port pointer in the USapID.

Recommended Action Report this error to your technical support representative.

Error Message

`%CLSDR-3-MSGERR: [chars] couldn't get a message`

Explanation The destination logical unit (DLU) could not send a correct message to Cisco Link Services I (CLSI) because the message was formed incorrectly. CLSI will not perform the desired action.

Recommended Action Report this error to your technical support representative.

Error Message

`%CLSDR-3-NOCEP: Cannot found cep in free pool`

Explanation A software or hardware error occurred.

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

Error Message

`%CLSDR-3-NOCLSSERVER: unable to start the Server process`

Explanation Could not start the CLSDRIVER process, possibly due to a resource problem. The subsystem using CLSDRIVER does not work.

Recommended Action Remove and then restore the destination logical unit (DLU) in the configuration file and try and reboot the system. Report this error to your technical support representative.

Error Message

`%CLSDR-3-NODLUCREATE: Cannot create DLU for this type [dec]`

Explanation The CLSDRIVER does not understand the destination logical unit (DLU) type. Currently, only STUN uses the CLSDRIVER. Any other value results in an error.

Recommended Action Make note of all details associated with this error message and report them to your technical support representative.

Error Message

`%CLSDR-3-NOINIT: CLSDRIVER not initialized`

Explanation A CLSDRIVER initialization failed earlier. Trying to use the driver now results in an error condition.

Recommended Action Remove and then restore the destination logical unit (DLU) in the configuration file and try and reboot the system. Report this error to your technical support representative.

Error Message

`%CLSDR-3-NOPORTCREATE: Cannot create PORT structure`

Explanation The CLSDRIVER cannot enable this port for processing.

Recommended Action Try rebooting the router. Report this error to your technical support representative.

Error Message

`%CLSDR-3-NOREMOVECEP: RemoveCep : Cep [hex] not on list`

Explanation The destination logical unit (DLU) is trying to remove a nonexistent connection end point from the internal data structure. This creates a problem in the connection end point (CEP) maintenance logic.

Recommended Action Report this error to your technical support representative.

Error Message

`%CLSDR-3-NOREMOVEPORT: RemovePort: port [hex] not on list`

Explanation The destination logical unit (DLU) is trying to remove a nonexistent port from the list of active ports because it does not have the correct list of active ports.

Recommended Action Report this error to your technical support representative.

Error Message

`%CLSDR-3-WRONGMSG`: Should never be here, cls message type unknown

Explanation The CLS message type is unknown to the destination logical unit (DLU).

Recommended Action Report this error to your technical support representative.

COMP Error Messages

Compression error messages

Error Message

`%COMP-3-CONFIGBAD`: Interface [chars] Compression internal configuration error

Explanation An internal software error occurred.

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

Error Message

`%COMP-5-NOBUF`: Interface [chars] [chars]

Explanation Interface serial0 compression getbuffer failed, causing Link Access Procedure, Balanced (LAPB) retransmissions.

Recommended Action Configure additional large and big buffers.

Error Message

%COMP-3-NOMEMORY: No memory to decompress packet on interface
[chars]

Explanation The router is attempting to decompress an incoming packet, but no memory is available for the decompression. The packet will be dropped. The rare occurrence of this message should not be of great concern.

Recommended Action These actions can help to rectify this condition:

- Turn off compression.
- Reduce the number of compressed interfaces or virtual circuits on the router.
- Reduce the clock rates on compressed interfaces.
- Upgrade the router with more memory, a faster processor, or both.

Error Message

%COMP-3-SIZEBAD: Interface [chars] Decompression size error

%COMP-3-SYNCBAD: Interface [chars] Decompression sync error

%COMP-3-VERSIONBAD: Interface [chars] Compression Version mismatch
expected [hex] received [hex]

Explanation One interface is configured for predictor compression, the other is not.

Recommended Action Configure both interfaces for predictor compression.

CONTROLLER Error Messages

Controller error messages

Error Message

```
%CONTROLLER-2-CRASHED: Interface Processor in slot [dec] not  
responding [hex]: shutting it down
```

Explanation A controller stopped responding to commands over the CBUS, so it was put into shutdown mode.

Recommended Action Re-enable the controllers by issuing the **no shut** configuration command on all controllers on the card, or hotswap out the bad card and install the new one. You must still manually “no shut” the controllers.

Error Message

```
%CONTROLLER-2-FIRMWARE: Controller [chars], [chars]
```

Explanation A software or hardware error occurred.

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

Error Message

```
%CONTROLLER-2-NOTFOUND: Controller not found for slot [dec].
```

Explanation An internal software error occurred.

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

Error Message

```
%CONTROLLER-3-REMLOOP: Controller [chars], remote loop [chars]  
[chars]
```

Explanation A configurable controller entered remote loopback.

Recommended Action No action required.

Error Message

%CONTROLLER-3-UPDOWN: Controller [chars] changed state to [chars]

Explanation A configurable controller changed its state.

Recommended Action No action required.

CSC2 Error Message

CPU card error message

Error Message

%CSC2-4-BREAK: AUX port hung because 'Transmit Break'
would not clear

Explanation The Universal Asynchronous Receiver/Transmitter (UART) in the console serial interface is malfunctioning.

Recommended Action Service the console serial port hardware.

DBUS Error Messages

Data bus error messages

Error Message

%DBUS-3-BADCTRLRTYPE: Invalid controller type [dec] in slot [dec]

Explanation An interface processor responded with an unknown or illegal controller type when queried. This should not happen unless the running software does not support the interface processor in question, or the interface processor fails.

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

Error Message

`%DBUS-3-BADEEPROM: Invalid EEPROM data found for card in slot [dec], card disabled`

Explanation The ID EEPROM on the indicated card is not programmed correctly.

Recommended Action Call your technical support representative for a replacement.

Error Message

`%DBUS-3-BADHSACONF: Down rev RSP EPROM found HSA system, upgrade EPROM, or remove one RSP`

Explanation A software or hardware error occurred.

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

Error Message

`%DBUS-3-DAUGHTER_STATS: Slot [n] control [hex1], status [hex2]`

Explanation A processor reported an error. This message is sent out in conjunction with other error messages to provide additional information.

Recommended Action Call your technical support representative and report information about all error messages displayed.

Error Message

`%DBUS-3-DBUSINTERR: Slot [dec], Internal Error`

Explanation A processor reported an internal error. The processor will be reset and not used until the next OIR event or microcode download, when it will be retested.

Recommended Action Reinstall the processor or download the microcode. If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance. Currently no boards report this error.

Error Message

`%DBUS-3-DBUSTIMOUT: dbus not responding in slot [dec]`

Explanation An interface processor failed to respond when queried for its controller type. This message indicates a probable software or hardware problem.

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

Error Message

`%DBUS-3-CXBUSERR: Slot [dec], CxBus Error`

Explanation A processor reported a bus error. The processor will be reset and not used until the next on-line insertion and removal (OIR) event or microcode download, when it will be retested.

Recommended Action Reinstall the processor or download the microcode. If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

`%DBUS-3-NOMAC: No system mac address found in RP1 EEPROM, using interface mac address`

Explanation You have either a prototype or an RP1 EEPROM that does not have the necessary block of MAC addresses.

Recommended Action Replace the RP1 EEPROM. Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

`%DBUS-3-NOMAGIC: No magic number found in RP1 EEPROM`

Explanation The structure containing the system MAC address needed by the OIR facility cannot be found in the RP EEPROM. The RP must be returned for reprogramming.

Recommended Action Return the RP for reprogramming and call your technical support representative for assistance.

Error Message

`%DBUS-3-NORESP: bad or no response, slot [int]`

Explanation A board in the slot identified in the error message failed to respond.

Recommended Action Record the output of the following commands:

- **show version**
- **show controllers cbus**
- **show diag**
- **show interface**
- **show running config**

Report this information to your technical support representative.

Error Message

`%DBUS-3-SLOTCOMP: Slot [dec], dbus error, slot [hex] and complement [hex] do not match`

Explanation A processor reported a mismatch between the contents of the slot register and its complement. This condition indicates a hardware failure in the diagnostic bus controller on that processor or on the diagnostic bus. The processor will be reset and not used until the next OIR event or microcode download, when it will be retested.

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

Error Message

`%DBUS-3-SW_NOTRDY: DBUS software not ready after > [chars], elapsed [dec], status [hex], control [hex]`

Explanation An interface processor failed to come online after being reset. A software or hardware error occurred.

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

Error Message

%DBUS-3-UNKNOWN: Slot [dec], unknown controller type [hex], ignoring

Explanation A processor reported a controller type that is unknown to the system. The processor will not be used and needs to be repaired.

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

Error Message

%DBUS-3-WCSCTRLRERR: Slot [dec], WCS Controller Instruction Error

Explanation The writable control store (WCS) is the set of devices on each interface processor that contains the running microcode. It can be loaded either from the ROM on the interface processor or from the system by using the downloadable microcode facility. In this message, a processor reported a WCS controller instruction error. The processor will be reset and not used until the next OIR event or microcode download, when it will be retested.

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

Error Message

%DBUS-3-WCSERR: Slot [dec], WCS controller in error state (0x[hex]), resetting

Explanation The processor in the slot identified in the error message reported a writable control store (WCS) controller error. The processor will be reset and new microcode loaded. This error message appears only when microcode is downloaded.

Recommended Action If this message recurs after the processor is reset and new microcode is loaded, call your technical support representative for assistance.

Error Message

```
%DBUS-3-WCSFLOW: Slot [dec], flow cntrl error loading WCS, last data  
0x[hex] pos [dec]
```

```
%DBUS-3-WCSLDERR: Slot [dec], error loading WCS, status 0x[hex]  
cmd/data 0x[hex] pos [dec]
```

Explanation A processor indicated an error condition while downloading microcode. The *status*, *cmd/data*, and *pos* numbers shown in the message reflect the error condition, the last byte of microcode loaded, and the position in the file, respectively. If this error appears, the microcode download is abnormally terminated and the ROM microcode is loaded.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

```
%DBUS-3-WCSPARERR: Slot [dec], WCS Controller Parity Error
```

Explanation A processor reported a WCS parity error. The processor will be reset and not used until the next OIR event or microcode download, when it will be retested.

Recommended Action Replace the processor or download microcode. If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

```
%DBUS-3-XILINX: ready wait timeout, slot [int]
```

Explanation The field-programmable gate arrays on an interface processor failed to load after being reset. This indicates a probable software or hardware problem.

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

DIALER Error Messages

Dial-on-demand routing (DDR) error messages

Error Message

`%DIALER-2-NOMEMORY: No memory to send dialer kicker packet out interface [chars]`

Explanation The router is out of memory and cannot initiate a dialer call to start the snapshot active period.

Recommended Action Check the memory usage of the router and report the problem to your technical support representative.

Error Message

`%DIALER-2-NOSWIDB: No software interface associated with hw interface [chars]`

Explanation An internal software error occurred.

Recommended Action Call your technical support representative and report the error message, the system version, and the router configuration. (Use the **show version** command to obtain the software version.)

DIRRESP Error Message

Director responder error messages

Error Message

`%DIRRESP-7-NOROUTE: no route for destination [int]`

Explanation A software or hardware error occurred.

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

Error Message

`%DIRRESP-3-SUBNETTED: unable to determine metric for [int], [int] subnetted`

Explanation A software or hardware error occurred.

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

DLC Error Messages

Data-link control error messages

Error Message

`%DLC-3-BADPARAM: Function [chars]: value [hex] passed in parameter [chars]`

Explanation An internal software error occurred.

Recommended Action Call your technical support representative and report the error message and the system version. (Use the **show version** command to obtain the software version.)

Error Message

`%DLC-3-INVPCEP: Close Station, invalid P_CEP`

Explanation An internal software error occurred.

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

Error Message

`%DLC-3-NOMEMORY: no memory for [chars]`

Explanation There was not enough free memory to complete the operation.

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

Error Message

%DLC-4-OPTNULL: Error, NULL parameter unexpected.

Explanation An internal software error occurred.

Recommended Action Call your technical support representative and report the error message and the system version. (Use the **show version** command to obtain the software version.)

Error Message

%DLC-3-WPUTERR: default port type

Explanation An internal software error occurred.

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

DLSw Error Messages

Data-link switching error messages

Error Message

%DLSWC-3-BADCLSI: [chars] primitive not valid for dlsw [chars]
[chars]

%DLSWC-3-BADCLSI CNF: [chars] Invalid confirm [chars] [chars]

%DLSWC-3-BADCLSI DATALEN: Bad data len = [dec] [chars]

%DLSWC-3-BADCLSI HDRLEN: [chars] Bad header len = [hex] [chars]

%DLSWC-3-BADCLSI IDTYPE: [chars] Invalid ID type = [hex] [chars]

%DLSWC-3-BADCLSI IND: [chars] Invalid indication [chars] [chars]

%DLSWC-3-BADCLSI PRIMTYPE: [chars] Invalid primitive type = [hex]
[chars]

%DLSWC-3-BADCLSI RET: [chars] Invalid ret code [hex] [chars] [chars]

%DLSWC-3-BADCLSI SAP: [chars] Bad clsi SAP id = [hex] [chars]

%DLSWC-3-BADDL COP: dlsw_action, bad dlc event [dec] [chars]

%DLSWC-3-BADPEER OP: bad peer op in peer_to_core -dec]

%DLSWC-3-BADSSPEVENT: dlsw_action, bad ssp event [dec] [chars]

Explanation A data-link switching system error occurred.

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

Error Message

%DLSWC-3-BADSSPHDR: bad ssp hdr in proc ssp - [chars] = [hex]

Explanation A Silicon Switch Processor (SSP) header received from the remote peer contains errors in one of the fields.

Recommended Action If the remote peer is a nonCisco router, confirm that it supports the DLSw RFC 1795 standard.

Error Message

%DLSWC-3-BADSSPOP: bad ssp op in proc ssp [dec]

Explanation A Silicon Switch Processor (SSP) frame with an invalid command was received from the remote peer.

Recommended Action If the remote peer is a nonCisco router, confirm that it supports DLSw RFC 1795 standard.

Error Message

%DLSWC-3-BADTIMEROP: dlsw_action, bad timer event [dec] [chars]

Explanation A data-link switching system error occurred.

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

Error Message

%DLSWC-3-FAILASSERT: Assertion failed: [chars]

Explanation An internal software inconsistency occurred. The router continues to operate.

Recommended Action If this continues to recur, record the entire message and note any DLSw+ problems that you experience. Provide this information to your technical support representative.

Error Message

%DLSWC-3-FORKFAIL: Can't fork : [chars] process);

Explanation DLSw process cannot run.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory. If this message recurs, copy the error message exactly as it appears and report it to your technical support representative.

Error Message

%DLSWC-3-FSMACTION: [chars]

Explanation Indicates frames sent by DLSw on LAN or WAN side. This is good, expected behavior.

Recommended Action Informational message only. No action required.

Error Message

%DLSWC-3-FSMCALL: [chars] state [chars] , event: [chars] [chars]

%DLSWC-3-FSMERR: fsm error [chars] [chars] [chars] event: [chars] [chars]

%DLSWC-3-FSMINTERR: fsm internal error - [chars]

%DLSWC-3-FSMUNKERR: [chars] [dec] : [chars] [chars] event:[chars] [chars] input: [dec] [dec] states: [dec] [dec]

%DLSWC-3-INVALIDSTATE: finite state machine in invalid state

%DLSWC-3-INVALIDTIMER: bad timer pop for [chars], new state [chars]

%DLSWC-3-NOBUFF: No buffer

%DLSWC-3-NODLSW: no dlsw, [chars]

Explanation A data-link switching system error occurred.

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

Error Message

%DLSWC-3-NOMEMBACK: No memory to create circuit entries - background

Explanation DLSw+ could not start a new circuit 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

%DLSWC-3-NOMEMDLC: No memory to create circuit entry - from dlc

%DLSWC-3-NOMEMSSP: No memory to create circuit entry - from ssp

Explanation A data-link switching system error occurred.

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

Error Message

%DLSWC-3-NOPARAM: dlsw_action, null param blk

%DLSWC-3-NOPEER: no peer, [chars]

Explanation A data-link switching system error occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears and report it to your technical support representative.

Error Message

%DLSWC-3-RECVSSP: SSP OP = [dec] [chars]) [chars] from [chars]

Explanation A Silicon Switch Program (SSP) frame was received from the remote peer.

Recommended Action Informational message only. No action required.

Error Message

%DLSWC-3-SENDSSP: SSP OP = [dec] ([chars]) [chars]to [chars] [chars]

Explanation A Silicon Switch Program (SSP) frame was sent to the remote peer.

Recommended Action Informational message only. No action required.

Error Message

`%DLSWP-3-PBADVALUE: DLSw: [chars]: invalid [chars] [dec]`

Explanation A bad parameter value was passed to function `chars1`—invalid parameter `chars2` with value. This error should not cause any network problems unless it happens repeatedly.

Recommended Action Copy the error message exactly as it appears and report it to your technical support representative as a case problem.

Error Message

`%DLSWP-3-PCAPMISMATCH: DLSw: [chars]: [chars]`

Explanation *Priority keyword* was used on one router but not on the other. The *priority keyword* is an option on the DLSW remote peer definition. If *priority keyword* is used on one router, it must be used on the other.

Recommended Action If you wish to use prioritization, use it on both routers.

Error Message

`%DLSWP-3-PGENERAL: DLSw: [chars] [chars]`

Explanation A general error condition was detected as described in the message text. This error should not cause any network problems unless it happens repeatedly.

Recommended Action Copy the error message exactly as it appears and report it to your technical support representative as a case problem.

Error Message

`%DLSWP-3-PNOMEM: DLSw: No memory to [chars]`

Explanation The router ran out of system memory for operation, as described in the message text. Most likely, the router image requires more system memory (RAM) than the router contains.

Recommended Action Consult with your technical support representative about memory requirements for a specific image.

Error Message

%DLSWP-3-PPASSIVE: DLSw: passive open failed from [inet]([dec]) -> [dec]

Explanation The system does not have enough main memory (RAM) for TCP to allocate the data structures required to accept an incoming TCP connection. Most likely, the router image requires more system memory (RAM) than the router contains.

Recommended Action Consult with your technical support representative about memory requirements for a specific image.

Error Message

%DLSWP-3-PPRIMISMATCH: DLSw: [chars]: [chars]

Explanation The **priority** option on the specified partner's remote peer definition does not match the **priority** option defined on the local remote peer definition. This is a configuration error.

Recommended Action Check each remote peer statement and make sure use of the **priority** option is consistent on both peers.

DMA Error Messages

Direct memory access error messages

Error Message

%DMA-1-BADICBPTR: msg_badicbptr

Explanation An internal software error occurred.

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

DMA Error Messages

Error Message

`%DMA-1-BADJUMPSTART: DMA jumpstart failed [dec]`

Explanation An anomalous situation where the direct memory access (DMA) jumpstart mechanism failed to find the DMA to start.

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

Error Message

`%DMA-1-BADLENGTH: msg_badlength`

Explanation VIP found that the memory device (MEMD) buffer header indicated a zero length transmit.

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

Error Message

`%DMA-1-BADOWN: msg_badown`

Explanation This message indicates that an unexpected own bit was found in a DMA entry.

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

DNET Error Messages

DECnet error messages

Error Message

`%DNET-3-HEARSELF: Hello type [hex] for my address
from [dec].[dec] via [chars]`

Explanation The system is receiving its own DECnet packets. Either a serial line is looped back or another host with the same DECnet address is already present on the LAN.

Recommended Action Check the serial lines (if present) and the DECnet configuration.

Error Message

`%DNET-4-MAPCON: Map entry [dec].[dec] conflicts with
adjacency to [dec].[dec]`

Explanation Your DECnet configuration is incorrect. A host that is specified as nonlocal is present on your local network.

Recommended Action Correct the configuration. Call your technical support representative if you need assistance.

Error Message

`%DNET-3-NOMEMORY: No memory available 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.

DNSIX Error Message

Department of Defense Intelligence Information System Network Security error message

Error Message

`%DNSIX-3-NOBUFFER: No buffer available for sending packet`

Explanation The system tried to allocate a buffer but that request was denied.

Recommended Action Examine buffer usage statistics; possibly more memory is required.

DRP Error Message

Director Response Protocol error messages

Error Message

`%DRP-7-NOROUTE: no route for destination [int]`

Explanation A software or hardware error occurred.

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

Error Message

`%DRP-3-NOWRITE: unable to send response to [int]:[dec]`

Explanation A software or hardware error occurred.

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

Error Message

`%DRP-3-SUBNETTED: unable to determine metric for [int], [int] subnetted`

Explanation A software or hardware error occurred.

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

DSPU Error Messages

Downstream physical unit error messages

Error Message

`%DSPU-3-ActpuNegResponse: ACTPU Neg rsp received from PU [chars]`

Explanation Remote PU rejected the router's request for an SSCP-PU session.

Recommended Action Verify PU configuration parameters at the router and at the remote PU. Determine whether the problem exists at the remote PU, and correct it. If the problem persists, call your technical support representative for assistance.

Error Message

`%DSPU-3-CLSIBadAdptCorr:CLSI bad Adaptor correlator, header= [chars]`

Explanation An internal software error occurred.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

`%DSPU-3-CLSIBadIdentifier: CLSI bad identifier, header= [chars]`

Explanation An internal software error occurred.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

%DSPU-3-CLSIBadIdentifierType: CLSI bad identifier type, header=[chars]

Explanation An internal software error occurred.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

%DSPU-3-CLSIBadLength: CLSI bad length, header=[chars]

Explanation An internal software error occurred.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

%DSPU-3-CLSIBadPrimitiveCmd: CLSI bad primitive command, header=[chars]

Explanation An internal software error occurred.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

%DSPU-3-CLSIBadPrimitiveType: CLSI bad primitive type, header=[chars]

Explanation An internal software error occurred.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

`%DSPU-3-CLSIBadReturnCode:CLSI bad return code: %d, header= [chars]`

Explanation An internal software error occurred.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

`%DSPU-3-CLSIUnexpctActSapCnf:CLSI unexpected ActivateSapCnf, header= [chars]`

Explanation An internal software error occurred.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

`%DSPU-3-CLSIUnexpctDeactSapCnf:CLSI unexpected DeactivateSapCnf, header= [chars]`

Explanation An internal software error occurred.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

`%DSPU-3-CLSIUnexpctEnableCnf:CLSI unexpectedEnableCnf, header= [chars]`

Explanation An internal software error occurred.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

`%DSPU-3-CLSIUnexpctIdStnInd: CLSI unexpected IdStnInd, header=[chars]`

Explanation An internal software error occurred.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

`%DSPU-3-DSPU_BufferCorrupted: DSPU could not free buffer - buffer corrupted`

Explanation An internal software error occurred.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

`%DSPU-3-LSConnInFailed: Connect in from remote MAC [chars] failed`

Explanation Connection with remote station could not be established.

Recommended Action Verify configuration parameters at the router and at the remote station. Determine whether the router is configured to accept connectIn from this remote station.

Error Message

`%DSPU-3-LSConnInFailedNoMem: Connect in from remote MAC [chars] failed; insufficient memory`

Explanation Connection with the remote station could not be established because of insufficient memory in the router.

Recommended Action Correct low memory problem in the router. If the problem persists, call your technical support representative for assistance.

Error Message

%DSPU-3-LSConnInFromHostFailed: Connect in from host [chars] with remote MAC [chars] failed

Explanation Connection with the remote host could not be established.

Recommended Action Verify host configuration parameters at the router and at the host. Determine whether the router is configured to accept connectIn from this host.

Error Message

%DSPU-3-LSConnInFromPuFailed: Connect in from pu [chars] with remote MAC [chars] failed

Explanation Connection with the remote PU could not be established.

Recommended Action Verify PU configuration parameters at the router and at the remote PU. Determine whether the router is configured to accept connectIn from this remote PU.

Error Message

%DSPU-3-LSConnOutToHostFailed: Connect out to host [chars] failed

Explanation Connection with the remote host could not be established.

Recommended Action Verify host configuration parameters at the router and at the host. Determine whether the host is active and responding to connection requests.

Error Message

%DSPU-3-LSConnOutToPuFailed:Connect out to pu [chars] failed

Explanation Connection with the remote PU could not be established.

Recommended Action Verify PU configuration parameters at the router and at the remote PU. Determine whether the remote PU is active and responding to connection requests.

Error Message

%DSPU-3-LSInvalidMaxIFrame: Connection attempt failed from XID=[chars], Invalid MaxIFrame= [dec]

Explanation An invalid MaxIFrame value in an exchange identification (XID) was received from the remote station; connection with remote station could not be established.

Recommended Action Correct link station configuration at the remote station.

Error Message

%DSPU-3-LSInvalidWindowSize:Connection attempt failed from XID=[chars], Invalid WindowSize= [dec]

Explanation An invalid WindowSize value in an exchange identification (XID) was received from the remote station; connection with remote station could not be established.

Recommended Action Correct link station configuration at the remote station.

Error Message

%DSPU-3-LSNoACTPUCapability:Connection attempt failed from XID=[chars], ACTPU not supported);

Explanation The remote station did not request PU 2.0 activation; connection with remote station is terminated.

Recommended Action Correct link station configuration parameters at the remote station to request a system services control point (SSCP)-PU session with the router.

Error Message

%DSPU-3-LSXIDNegotiationError: XID received with CV 22, bad byte=[dec], bad bit= [dec]

Explanation XID3 with an error indication was received from the remote station; connection with the remote station could not be established.

Recommended Action Determine, from the control vector (CV) 22 byte or bit information, which field in the XID3 is rejected by the remote station, and correct the link station configuration parameters at either the router or the remote station.

Error Message

%DSPU-3-NotifyNegRsp: LU [dec] received a Notify Neg Resp from host [chars]

Explanation Remote host rejected the router's request to activate/deactivate an SSCP-LU session.

Recommended Action Verify host configuration parameters at the router and at the remote host. Determine whether the problem exists at the remote host and correct it. If the problem persists, call your technical support representative for assistance.

Error Message

%DSPU-3-SnaBadData: Bad SNA data received from PU [chars], data=[chars]

Explanation Unrecognized SNA data was received from the remote PU.

Recommended Action Correct the problem at the remote PU. If the problem persists, call your technical support representative for assistance.

Error Message

%DSPU-3-UnknownXid:XID Format not supported, XID= [chars]

Explanation Unsupported XID received from the remote station; connection with remote station could not be established.

Recommended Action Configure the remote station to send supported XID (if possible). Supported XID formats are:

- XID Format 0
- XID Format 3

DSX1 Error Messages

Channelized E1 (Europe) and T1 (US) DSX-1 telephony standard error messages

Error Message

`%DSX1-1-NOMEMORY: msgtxt_nomemory`

`%DSX1-1-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

`%DSX1-3-BADENCAP: msgtxt_badencap`

`%DSX1-3-BADENCAP: Unit [dec], bad encapsulation in idbenctype = [hex]`

Explanation An internal software error occurred.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

DUAL Error Messages

Enhanced Interior Gateway Protocol error messages

Error Message

`%DUAL-3-ANCHORCOUNT: Anchor count negative`

Explanation A software or hardware error occurred.

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

Error Message

%DUAL-3-BADCOUNT: Route [chars], [dec] successors, [dec] rdbs

Explanation A hardware or software error occurred.

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

Error Message

%DUAL-3-BADSUMNOTIFY: Dual notified us about summary [chars]

Explanation A hardware or software error occurred.

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

Error Message

%DUAL-6-EVENT: [chars], [chars]

Explanation A hardware or software error occurred.

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

Error Message

%DUAL-3-INTERNAL: [chars] [dec]: Internal Error

Explanation A software or hardware error occurred.

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

Error Message

%DUAL-3-LINKSEXIST: Interface [chars] is going down and [dec] links exist

Explanation An interface is going down or is being removed from routing through IGRP, but not all links (neighbors) have been removed from the topology table.

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

Error Message

%DUAL-3-LINKSTILLUP: Link [dec] [chars] still exists on [chars]

Explanation A hardware or software error occurred.

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

Error Message

%DUAL-3-MULTIFLOW: Flow control error, [chars], on [chars]

Explanation A hardware or software error occurred.

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

Error Message

%DUAL-5-NBRCHANGE: [chars] [dec]: Neighbor [chars] ([chars]) is [chars]: [chars]

Explanation A neighbor came up or went down.

Recommended Action No action is required.

Error Message

`%DUAL-3-NOBUFFER: No buffers available for [dec] byte packet`

Explanation The DUAL software was unable to allocate a packet buffer. The system may be out of memory.

Recommended Action Record the output from the following commands: **show proc mem** (repeated twice), **show mem**, **show buffers**, **show version**, **write terminal**. Provide this information to your technical support representative.

Error Message

`%DUAL-3-NOHANDLE: Handle [dec] is not allocated in pool.`

Explanation A hardware or software error occurred.

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

Error Message

`%DUAL-3-NOMATCH: Nexthop and infosource don't match. N = [chars]`

Explanation A hardware or software error occurred.

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

Error Message

`%DUAL-3-NOMEMORY: No memory available for [chars]`

Explanation A hardware or software error occurred.

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

Error Message

%DUAL-3-NOSOCKET: Unable to open socket for AS [dec]

Explanation A hardware or software error occurred.

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

Error Message

%DUAL-3-PEERSEXIST: [dec] peers exist on IIDB [chars]

Explanation A software or hardware error occurred.

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

Error Message

%DUAL-3-PROBESEQ: Bad probe sequence [dec] from [chars], expecting [dec],

Explanation A software or hardware error occurred.

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

Error Message

%DUAL-3-RDBLEFT: Lingered DRDB deleting IIDB, dest [chars], nexthop [chars] ([chars]), origin [chars]

Explanation A software or hardware error occurred.

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

Error Message

%DUAL-3-REFCOUNT: Negative refcount in pakdesc [hex]

Explanation A software or hardware error occurred.

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

Error Message

%DUAL-3-SIA: Route [chars] stuck-in-active state in [chars] [dec].
Cleaning up

Explanation A hardware or software error occurred.

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

Error Message

%DUAL-3-SIANOHANDLE: Stuck-in-active and unallocated handle in
reply-status table. Cleaning up

Explanation A hardware or software error occurred.

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

Error Message

%DUAL-3-UNKTIMER: Unknown timer type [dec] expiration

Explanation A hardware or software error occurred.

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

DVMRP Error Messages

Distance Vector Multicast Routing Protocol (DVMRP) error messages

Error Message

%DVMRP-1-BADMASK: Bad mask [int] received from [int], Report ignored

Explanation A software or hardware error occurred.

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

Error Message

%DVMRP-1-ROUTEHOG: Receiving [dec] routes from [int] ([chars]) in the last [chars]

Explanation A software or hardware error occurred.

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

EGP Error Messages

Exterior Gateway Protocol error messages

Error Message

%EGP-3-NOPDB: No pdb for [inet]

Explanation An internal software error occurred.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

%EGP-3-TOOBIG: Insufficient ([dec]) buffering for update message

Explanation An EGP update message was too large to fit into a single buffer.

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

ENV Error Messages

Environmental monitor card error messages

Error Message

%ENV-2-FLOW: Air flow appears marginal.

Explanation A temperature reading indicates poor air flow.

Recommended Action Attempt to resolve the air flow problem. If the problem is not resolved, call your technical support representative for assistance.

Error Message

%ENV-1-SHUTDOWN: Environmental Monitor initiated shutdown.

Explanation One of the environmental measurements reached SHUTDOWN status. The system is about to shut down the processor to prevent damage to the hardware.

Recommended Action Attempt to resolve the temperature problem. If the problem is not resolved, call your technical support representative for assistance.

ENVM Error Messages

Error Message

`%ENV-2-TEMP: Ambient temperature measured [chars]. Shutdown at [chars]`

Explanation The ENV card indicates the temperature it measured and the temperature at which it shuts down.

Recommended Action Attempt to resolve the temperature problem. If the problem is not resolved, call your technical support representative for assistance.

Error Message

`%ENV-2-VOLTAGE: [chars] testpoint measured [chars]. Shutdown margin is [chars].`

Explanation The ENV card indicates which voltage it is measuring (for example, +5, +12, -5, -12), the amount of voltage that it measured, and the voltage at which the processor will shut down the system.

Recommended Action Attempt to resolve the voltage problem. If the problem is not resolved, call your technical support representative for assistance.

ENVM Error Messages

Environmental monitor error messages for the Cisco 7000 series

Error Message

`%ENVM-2-FAN: Fan array has failed, shutdown in [dec] minutes`

Explanation There might be a hardware problem with the fan array. If the error condition continues for two minutes, the router automatically shuts down to prevent damage to router components.

Recommended Action If the system shuts down, replace the fan tray. Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

`%ENVM-2-FANOK: Fan array has recovered.`

Explanation One or more of the variable speed fans on the 7010 recovered from a prior failure.

Recommended Action Informational message only. No action required.

Error Message

`%ENVM-1-SHUTDOWN: Environmental Monitor initiated shutdown`

Explanation The system reached a SHUTDOWN temperature level, and the router is being shut down to avoid any damage.

Recommended Action Attempt to resolve the temperature problem. If the problem is not resolved, call your technical support representative for assistance.

Error Message

`%ENVM-2-SUPPLY: Power Supply is Non-Operational`

Explanation A power supply is not working or is not turned on.

Recommended Action Check that the power supply is turned on; if it is turned on and still does not operate, call your technical support representative for assistance.

Error Message

`%ENVM-2-TEMP: [chars] temperature has reached [chars] level at [dec] (C)`

Explanation The temperature parameter shown reached a warning or critical level and is approaching or approached a condition that is outside the acceptable range.

Recommended Action Attempt to resolve the temperature problem. If the problem is not resolved, call your technical support representative for assistance.

Error Message

%ENVM-2-VOLTAGE: [chars] volts has reached [chars] level at [chars] (V)

Explanation The voltage parameter shown reached a critical level and is now out of specification.

Recommended Action Verify the failure and call your technical support representative for repair or replacement.

ETHERNET Error Messages

C1000 series Ethernet error messages

Error Message

%ETHERNET-1-NOMEMORY: msgtxt_nomemory

Explanation Insufficient memory exists to allocate the necessary memory pools.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

%ETHERNET-1-TXERR: [chars]: Fatal transmit error. Restarting...

Explanation A fatal transmit error occurred on the Ethernet line, causing the line to be restarted.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

FDDI Error Messages

Fiber Distributed Data Interface error messages

Error Message

%FDDI-3-BADMUL: Unit [dec], Can't set FDDI mac address to hardware multicast address [enet]

Explanation Part of your FDDI hardware failed.

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

Error Message

```
%FDDI-3-BADSLOT: Unit [dec], Slot [dec] does not exist
```

Explanation The main processor detects an invalid slot location for one of the network interface cards. This should never happen.

Recommended Action Call your technical support representative about obtaining a replacement card.

Error Message

```
%FDDI-3-FDDIFAIL: Interface [chars], [chars], [chars] = [hex]
```

Explanation The FDDI interface failed.

Recommended Action Save the output of the error message and call your technical support representative for assistance.

Error Message

```
%FDDI-3-FDDIFAIL2: Interface [chars], [chars], [chars] = [hex],  
[chars] = [hex]
```

Explanation The FDDI interface failed. This is the second line of the preceding FDDIFAIL message. This line contains debug information.

Recommended Action Save the output of the error message and call your technical support representative for assistance.

Error Message

```
%FDDI-3-FDDIRSET: Interface [char], Error ([char]-04x)  
[chars] - fddi_reset()
```

Explanation FDDI-related command execution failure.

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

Error Message

%FDDI-3-FDDIRSETU: Unit [dec], Error ([char]-04x)
[chars] - fddi_reset()

Explanation FDDI-related command execution failure.

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

Error Message

%FDDI-3-NOCAM: Unit [dec], No CAM exists for this interface.

Explanation A hardware or software error occurred.

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

Error Message

%FDDI-1-NOMEMORY: msgtxt_nomemory

Explanation The FDDI Management Information Base/Station Management (MIB/SMT) processing functions could not initialize due to insufficient memory.

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

FDDISTAT Error Message

Fiber Distributed Data Interface (FDDI) state error message

Error Message

%FDDISTAT-4-STATUS: FDDI state [chars] detected on interface [chars]

Explanation An internal software error occurred.

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

FILESYS Error Messages

Personal Computer Memory Card International Association (PCMCIA) Flash memory card error messages

Error Message

%FILESYS-5-PCMCIA_INSERT: PCMCIA flash card is inserted into [chars]

Explanation A Flash memory card was just inserted into slot 0 or slot 1.

Recommended Action Informational message only that indicates the card is there now. No action required.

Error Message

%FILESYS-5-PCMCIA_REMOVE: PCMCIA flash card is removed from [chars]

Explanation A Flash memory card was just pulled out of slot 0 or slot 1.

Recommended Action Make sure the removed card does not contain important files such as the boot system image, boot loader image, system configuration file, and so on. Make these checks before doing a system reload.

FLASH Error Messages

Flash nonvolatile memory error messages

Error Message

%FLASH-3-ACCESSATTRIBONRP: [chars]

Explanation The route processor cannot access the Flash memory card's attribute memory. The Flash memory card should continue to operate normally.

Recommended Action If there is still a problem with the Flash memory card, copy the error message exactly as it appears and report it to your technical support representative.

Error Message

%FLASH-3-ERASEFAIL: flash_erasefail_msg

Explanation The system was unable to erase a Flash device.

Recommended Action Try to erase again. If that fails, call your technical support representative for assistance.

Error Message

%FLASH-3-WRITEFAIL: flash_writefail_msg

Explanation The write operation to Flash failed.

Recommended Action Try erasing the device and trying the write again. If that fails, call your technical support representative for assistance.

FR Error Messages

Frame Relay error messages

Error Message

%FR-5-DLCICHANGE: Interface [chars] - DLCI [dec] state changed to [chars]

Explanation The state of the Frame Relay PVC specified by the DLCI changed.

Recommended Action Notification message only. No action required.

Error Message

%FR-4-MAPERROR: Interface [chars] - remove maps or interface-dlci command before change

Explanation A hardware or software error occurred.

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