

System Error Messages

AAA Accounting Messages

TACACS+ Authentication, Authorization, and Accounting security accounting error messages

Error Message

```
%AAAA-3-BADSTR, MSG_TRACEBACK, 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, MSG_TRACEBACK, 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.

ALIGN Error Messages

This facility controls a feature in the 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 Report this message to your technical support representative.

Error Message

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

Explanation The router identified a fatal error in a software component and could not correct it.

Recommended Action Record the entire message and immediately contact your technical support representative for assistance.

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 Call your technical support representative for assistance.

Error Message

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

Explanation The router cannot start the memory performance monitoring system because there is not enough system memory to do so.

Recommended Action Call your technical support representative for assistance.

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 Report the entire message and any problem you are experiencing 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 Report the entire message and any problem you are experiencing to your technical support representative.

APPN Error Messages

Advanced Peer-to-Peer Networking error messages

Error Message

`%APPN-1-APPNALERT, MSG_TRACEBACK | MSG_PROCESS, [chars]`

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

`%APPN-2-APPNCRIT, MSG_TRACEBACK | MSG_PROCESS, [chars]`

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%APPN-7-APPNDEBUG: [chars]

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%APPN-0-APPNEMERG, MSG_TRACEBACK | MSG_PROCESS, [chars]

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%APPN-3-APPNERR: [chars]

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%APPN-7-APPNETERROR: [chars]

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%APPN-3-APPNETLOG: [chars]

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%APPN-6-APPNINFO: [chars]

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%APPN-6-APPNLOGMSG: [chars]

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%APPN-5-APPNNOTICE: [chars]

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%APPN-7-APPNSENDEVENT: [chars]

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%APPN-6-APPNSENDMSG: [chars]

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

ARAP Error Messages

Error Message

`%APPN-5-APPNSENDREQ: [chars]`

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

`%APPN-4-APPNWARNING: [chars]`

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

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 MNP4 link set up.

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 only appears when ARAP logging is configured. The message notes that an ARAP 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 will only appear when ARAP logging is configured. The message notes that an ARAP 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 ARAP at an unexpected time. This may be due to modems dropping, server error, client problems, or any number of other difficulties.

Recommended Action Possibly correlate with 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 ARAP client was denied access, probably due to a configuration problem on the server. Error message should indicate the problem. Denials due to bad passwords don't show up here.

Recommended Action Investigate problem reported in error message.

Error Message

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

Explanation ARAP could not obtain a buffer for an incoming packet.

Recommended Action Examine buffer usage statistics. Possibly more memory is required.

Error Message

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

Explanation The startup negotiation between a client and the ARAP server fell out of order. If this is sporadic, 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 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 ARAP failed to run because it couldn't 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 ARAP 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 set up.

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 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-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 internet.

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 Call your technical support representative for assistance.

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, MSG_PROCESS|MSG_TRACEBACK, AppleTalk CPU piggy info:
just spent [dec] ms. without schedule

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

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-DELRROUTE: 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 Call your technical support representative for assistance.

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 Call your technical support representative for assistance.

Error Message

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

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

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 Call your technical support representative for assistance.

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 Call your technical support representative for assistance.

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 Call your technical support representative for assistance.

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 Call your technical support representative for assistance.

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 Call your technical support representative for assistance.

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 Call your technical support representative for assistance.

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 Call your technical support representative for assistance.

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 Call your technical support representative for assistance.

Error Message

```
%AT-6-PATHADD: [chars]: AppleTalk [chars] path to network
[ataalk_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 Call your technical support representative for assistance.

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.

ATM Error Message

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 Message

Asynchronous Transfer Mode error message

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

Border Gateway Protocol error messages

Error Message

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

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

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.

BRI Error Messages

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 message recurs, call 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, 0, msgtxt_nomemory, MSGDEF_LIMIT_SLOW

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 Call your technical support representative for assistance.

Error Message

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

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

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 protocol 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 sub-system 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-CONNILLSTATE: 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 message recurs, call 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-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. Call your technical support representative for assistance.

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 message recurs, call your technical support representative for assistance.

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]

%STUN-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.

BSTUN Error Messages

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.

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 Call 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 Call your technical support representative for assistance.

Error Message

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

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

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 Call your technical support representative for assistance.

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 Call your technical support representative for assistance.

Explanation

%CBUS-3-CCBCMDFAIL0: Controller [dec], cmd ([dec]) 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-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, MSG_TRACEBACK, CCB handover timed out, CCB 0x[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 Call your technical support representative for assistance.

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 Call your technical support representative for assistance.

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-CIPRESET: Interface [chars], Error [hex] [chars] -
cip_reset()

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%CBUS-3-CMD, MSG_TRACEBACK, 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, MSG_TRACEBACK, Cmd timed out, CCB 0x[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 message recurs, call 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 Call your technical support representative for assistance.

Error Message

%CBUS-3-CTRCMDFAILED2: Unit [dec], CTR Command %#04x Failed, Code
%#04x

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

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 message recurs, call your technical support representative for assistance.

Error Message

%CBUS-3-CTRLRCMDFAIL0: 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-CTRLRCMDFAIL1: 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-CTRLRINITERR: Controller [dec], Error [hex], cdb [hex] [chars] - cbus_init()

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

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 message recurs, call 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 message recurs, call 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 message recurs, call 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 MEMD 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 MEMD tests failed. The daughter card must be able to write to some MEMD 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 Call your technical support representative for assistance.

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 Call your technical support representative for assistance.

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 %08x [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 Call your technical support representative for assistance.

Error Message

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

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%CBUS-3-NOBUF, MSG_TRACEBACK, 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. The most likely problem is a missing or invalid MAC address cookie ROM. A less likely explanation is corrupted MEMD after the memd self-tests.

Recommended Action Call your technical support representative for assistance. It will be necessary to replace the cookie ROM.

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. This can indicate an interface with no cable attached. It can also be an indication of a software problem.

Recommended Action Check for unterminated interfaces. 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 message recurs, call 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]: %04X %04X %04X %04X %04X %04X
```

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, MSG_TRACEBACK, 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 Call your technical support representative for assistance.

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 Call your technical support representative for assistance.

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 Call your technical support representative for assistance.

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

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

Recommended Action Call your technical support representative for assistance.

Error Message

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

Explanation A soft power failure occurs when the router shuts itself down due to a detected over temperature condition.

Recommended Action Call your technical support representative for assistance.

Error Message

`%CI-3-CTRLRTYPE: Wrong controller type %02x`

Explanation The CI was manufactured incorrectly.

Recommended Action Call your technical support representative for assistance.

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-2-INT: Unexpected interrupt - status %02x`

Explanation An unexpected interrupt occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

`%CI-4-MAXOUTPUT: Power supply [dec] [dec]V is at or near rated output`

Explanation The specified power supply is at or near its maximum rated output for the specified voltage.

Recommended Action Closely monitor the situation. Install another power supply, if necessary. If the situation worsens, call your technical support representative for assistance.

Error Message

`%CI-3-NOACK, MSG_TRACEBACK, [chars] acknowledge failure, cmd %02x, addr %02x, data %02x`

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-3-NOFORK: Couldn't start environment polling daemon`

Explanation The CI software failed to initialize properly.

Recommended Action Call your technical support representative for assistance.

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 and fully 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.

Error Message

%CI-3-SLOTCOMP: Inconsistent slot %02x

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.

Error Message

%CI-4-SYSLOAD: System [dec]V load exceeds single power supply [dec] capacity

Explanation The measured current load of the system voltage is higher than can be supported by the single power supply.

Recommended Action Call your technical support representative for assistance, especially if non-redundant operation is unacceptable.

CI Error Messages

Error Message

%CI-4-UNBALANCE: Unbalanced [dec]V output from dual power supplies

Explanation The current output at the specified voltage from the two power supplies is significantly different.

Recommended Action Call your technical support representative for assistance.

CIP Error Messages

The system can report error conditions in several facility codes related to the Channel Interface Processor. As shown in the following example, the format of the error messages for the CIP differs slightly from the format of other system error messages:

```
%CIP3-6-MSG:%ADAPTER-6-DIAGBEGIN: [chars] diagnostic starting
```

All CIP-related error messages begin with a percent sign (%), the facility code CIP, and a number that indicates the slot where the CIP is installed. The next meaningful information is the facility subcode, severity level, and mnemonic. This part of the error message is preceded by another percent sign, such as %ADAPTER-6-DIAGBEGIN in the above example.

For simplicity, CIP error messages are organized into sections alphabetically by facility subcode beginning with CIP-ADAPTER. Within each CIP section, messages appear alphabetically by mnemonic.

Note CIP and slot number are not shown in the error message listing that follows.

CIP-ADAPTER Error Messages

CIP error messages for the adapter task

Error Message

`%ADAPTER-6-DIAGBEGIN: [chars] diagnostic starting`

Explanation A user used the **test cbus** command to request a particular adapter diagnostic to be run. This message informs the user that the diagnostic routine started.

Recommended Action Wait for the next message.

Error Message

`%ADAPTER-0-DIAGDATA: Module Call: [hex] [hex] Error ID: [hex] [hex]`

Explanation A diagnostic routine detected a failure in the ECA hardware. These codes are used to locate the specific component that failed.

Recommended Action Report this message to your technical support representative.

Error Message

`%ADAPTER-6-DIAGDATA2: Module Call: [hex] [hex] Error ID: [hex] [hex]`

Explanation A diagnostic routine detected a failure in the ECA hardware. These codes are used to locate the specific component that failed.

Recommended Action Report this message to your technical support representative.

Error Message

`%ADAPTER-0-DIAGFAIL: Port [dec] failed the [chars] diagnostic`

Explanation A diagnostic routine failed. The specified port will not be used.

Recommended Action Report this message to your technical support representative.

Error Message

%ADAPTER-6-DIAGFAIL2: [chars] diagnostic failed

Explanation A diagnostic requested by the **test cbus** command failed.

Recommended Action Report this message to your technical support representative.

Error Message

%ADAPTER-6-DIAGGOOD2: [chars] diagnostic ran successfully

Explanation A diagnostic requested by the **test cbus** command completed successfully.

Recommended Action None.

Error Message

%ADAPTER-6-DIAGRANGE: Diagnostic number [dec] out of range 0-[dec]

Explanation The diagnostic number requested by the **test cbus** command is not a valid diagnostic number.

Recommended Action Re-enter the command with a valid diagnostic number.

Error Message

%ADAPTER-6-DIAGSTOP: Interface must be shutdown to run diagnostic

Explanation The **test cbus** command was used to run a diagnostic on an active interface.

Recommended Action Use the **shutdown** command to stop the interface and then reissue the diagnostic request.

Error Message

%ADAPTER-0-DIAGTERM: Port [dec]: The [chars] diagnostic failed to terminate

Explanation A diagnostic routine did not complete execution. The specified port will not be used.

Recommended Action Report this message to your technical support representative.

Error Message

`%ADAPTER-6-DIAGTERM2:[chars] diagnostic failed to terminate`

Explanation A diagnostic requested via the **test cbus** command did not terminate.

Recommended Action Report this message to your technical support representative.

Error Message

`%ADAPTER-0-LOADFAIL:Port [dec] microcode load failed.`

Explanation Each adapter has an onboard microprocessor. This message indicates that the operation to load the code for that microprocessor failed.

Recommended Action Report this message to your technical support representative.

Error Message

`%ADAPTER-6-LOGDATA: [hex] [hex] [hex] [hex] [hex] [hex] [hex] [hex]
[hex]`

Explanation An error occurred in the adapter. The information displayed will help personnel in software development to determine the nature of the error.

Recommended Action Report this message to your technical support representative.

Error Message

`%ADAPTER-6-LOGOUT: Port [dec] logout data`

Explanation This message is displayed at the start of the logout data. It is then followed by the previous message.

Recommended Action Report this message to your technical support representative.

Error Message

`%ADAPTER-6-LOGSAME: [hex] to [hex] same as above`

Explanation This message is used when logout information is displayed in order to avoid printing duplicate data.

Recommended Action Report this message to your technical support representative.

Error Message

`%ADAPTER-6-SCAN: Port [dec] scan data`

Explanation The data in this message is scan data for the adapter in the specified port. This data is usually produced as a result of a hardware error.

Recommended Action Report the entire error message and scan data to your technical support representative.

Error Message

`%ADAPTER-6-SCANDATA: [hex] [hex] [hex] [hex] [hex]`

Explanation The data in this message is related to a hardware failure of an adapter.

Recommended Action Report the entire error message and scan data to your technical support representative.

Error Message

`%ADAPTER-0-START_FAIL: Diagnostics failed for port [dec], start request ignored.`

Explanation Prior to the adapter receiving a **start** command from the route processor, a set of diagnostics runs. If one of them fails, then the adapter will not be started when the **start** command is issued.

Recommended Action Report this message to your technical support representative.

Error Message

`%ADAPTER-6-WRAP: Wrap plug detected in port [dec]. Wrap loop started.`

Explanation A wrap plug is installed in the specified port. Wrap diagnostics will run until the plug is removed if this is the only adapter or if both adapters have wrap plugs installed.

Recommended Action Remove the wrap plug and connect the interface to a channel.

Error Message

`%ADAPTER-6-WRAPSTOP1: Wrap plug removed from port [dec]. Wrap loop ended.`

Explanation The wrap plug was removed, causing the wrap diagnostics to terminate.

Recommended Action No action is required.

Error Message

`%ADAPTER-6-WRAPSTOP2: Port [dec] active. Port [dec] wrap loop ended.`

Explanation The wrap diagnostics have been terminated because the other adapter is active.

Recommended Action Remove the wrap plug and connect the interface to a channel if you wish to use this adapter. Otherwise, no action is required.

CIP-BSQ Error Messages

CIP error messages for buffer status queue processing

Error Message

`%BSQ-0-SCB_CHAIN: Read SCB chain is out of sequence`

Explanation The sequence of buffer status queue entries received for read commands does not match the sequence of the storage control blocks used for the reads. This is a fatal internal logic error.

Recommended Action Report this message to your technical support representative.

Error Message

`%BSQ-0-TOOMANY: More than 16 buffers queued for one channel command`

Explanation Either an attempt was made to transfer more data in a single channel command word than the CIP can handle, or an internal error occurred. This is a fatal internal logic error.

Recommended Action Report this message to your technical support representative.

CIP-CBUS_ATT N Error Message

CIP error messages relating to the CBUS_ATT N routine, the facility that receives configuration requests and gathers statistics

Error Message

`%CBUS_ATT N-3-BADADDR:Bad memory address [hex] requested`

Explanation The RP requested the CIP to store a configuration command at an invalid memory address. The CIP recovered by ignoring the request.

Recommended Action Report this error to your technical support representative.

CIP-CBUS_WRITE Error Messages

CIP error messages for the CBUS_WRITE facility, which is used by the Enhanced Online Insertions Removal (EOIR) support on the CIP to track writes to MEMD and reissue them if a cBus problem occurs.

Error Message

`%CBUS_WRITE-3-BADTYPE: Invalid write type [dec]`

Explanation The type parameter in the write tracking table is invalid. This is an internal CIP logic error. The CIP recovered by ignoring the entry.

Recommended Action Report this error to your technical support representative.

Error Message

`% CBUS_WRITE-3-INVALID: Valid bit not set in IO exception register [hex]`

Explanation A write error interrupt occurred, but the hardware that keeps track of the address of the error does not have a valid address.

Recommended Action Report this error to your technical support representative.

Error Message

`%CBUS_WRITE-3-MISSING: Entry for address [hex] not found`

Explanation A write error was detected, but there was no corresponding entry in the table that keeps track of these entries. This is an internal CIP logic error. The CIP recovered by ignoring the write error.

Recommended Action Report this error to your technical support representative.

Error Message

`%CBUS_WRITE-3-STACK: [dec] [dec] [hex] [hex] [hex]`

Explanation This is a debugging print of the CBUS write stack. It is associated with the `CBUS_WRITE-3-MISSING` error message.

Recommended Action Report this error to your technical support representative.

Error Message

`%CBUS_WRITE-3-UNEXPECTED: Unexpected IO write error.Address=[hex]`

Explanation A write operation to an address other than MEMD timed out. This is probably a hardware problem. The CIP failed and attempted to restart.

Recommended Action Record the address indicated in the error message. The address will enable a support representative to determine which component to replace. Report this error to your technical support representative.

CIP-CCA Error Messages

CIP error messages for channel card adapter processing

Error Message

`%CCA-3-ACR: Accept command response status received`

Explanation The adapter notified the CIP that an accept command response was issued. The CIP does not request notification of accept command response messages. Therefore, this message means the adapter generated an unexpected message.

Recommended Action Normal processing will resume, but it is useful for software development personnel to know that this message occurred. Report this message to your technical support representative.

Error Message

`%CCA-0-BADCCA: Undefined CCA code received CCA=[hex] [hex]`

Explanation The adapter presented the CIP with a message using an undefined code point. This is a fatal internal logic error.

Recommended Action Report this message to your technical support representative.

Error Message

`%CCA-0-BSQ_FULL: Buffer status queue is full`

Explanation The adapter notified the CIP that the buffer status queue was full. The CIP never provides enough buffers to the adapter to cause the buffer status queue to become full. This is a fatal internal logic error.

Recommended Action Report this message to your technical support representative.

Error Message

`%CCA-3-BYPASS: Select bypass switch is in bypass position for port [dec]`

Explanation A user attempted to start the PCA with the select bypass switch in the BYPASS position. The PCA cannot go on-line with the switch in the bypass position.

Recommended Action Move the select bypass switch on the PCA-Y cable from the bypass position to the SELECT position.

Error Message

`%CCA-3-CANCEL1: Invalid cancel code [hex]`

Explanation The adapter notified the CIP that a halt subchannel command was issued by the host, but provided the CIP with an undefined type of cancel.

Recommended Action The CIP will recover but software development personnel should be informed. Report this message to your technical support representative.

Error Message

`%CCA-3-CANCEL2: Cancel received for undefined path [hex]`

Explanation The adapter notified the CIP that a halt subchannel command was issued by the host for an undefined path. This is an internal logic error.

Recommended Action The CIP software recovered but software development personnel need to know the problem. Report this message to your technical support representative.

Error Message

`%CCA-3-COMMAND_PATH: Command connection received for undefined path [hex]`

Explanation The adapter notified the CIP that a start subchannel command was issued by the host for an undefined path. This is an internal logic error.

Recommended Action The CIP software recovered, but software development personnel need to know the problem. Report this message to your technical support representative.

Error Message

`%CCA-3-CONN_RESULT: Connection result for device [hex] [hex] expected [hex] [hex]`

Explanation The adapter notified the CIP that a connection was established for a device other than the one that the CIP had just requested. This is an internal logic error.

Recommended Action The CIP software recovered, but software development personnel need to know the problem. Report this message to your technical support representative.

Error Message

`%CCA-0-DEV_ERR1: Undefined device error type [hex]`

Explanation When a device error occurs, the adapter specifies the type of error so that the correct recovery action can be performed. The type specified is not defined. This is a fatal internal logic error.

Recommended Action Report this message to your technical support representative.

Error Message

`%CCA-0-DEV_ERR2: Device error but no active defined device`

Explanation A device error was generated, and either it occurred while status was being presented but no device was active, or it occurred for an undefined device. This is a fatal internal logic error.

Recommended Action Report this message to your technical support representative.

Error Message

`%CCA-0-DEV_ERR3: Device error received for undefined path [hex]`

Explanation A device error occurred, but the path specified in the device error message is not defined. This is a fatal internal logic error.

Recommended Action Report this message to your technical support representative.

Error Message

`%CCA-3-END_STATUS: Ending status interrupt received for [hex] CCW`

Explanation The adapter reported an ending status interrupt for a channel command word that should not have caused the CIP to be notified. This is an internal logic error.

Recommended Action The CIP recovered, but software development personnel should be notified of the problem. Report this message to your technical support representative.

Error Message

`%CCA-3-LOGOUT: Invalid logout command modifier [hex]`

Explanation The adapter sent a request to the CIP to perform a logout, but the command modifier in the message was not a valid value. This is an internal logic error.

Recommended Action The CIP recovered, but software development personnel should be notified of the problem. Report this message to your technical support representative.

Error Message

`%CCA-3-REQUEST_STATUS: Request status received for undefined path [hex]`

Explanation The adapter requested the CIP to present status for an undefined path. This is an internal logic error.

Recommended Action The CIP recovered, but software development personnel should be notified of the problem. Report this message to your technical support representative.

Error Message

`%CCA-3-RESET_PATH: Reset received for undefined path [hex]`

Explanation The adapter requested the CIP to perform reset processing for an undefined path. This is an internal logic error.

Recommended Action The CIP recovered, but software development personnel should be notified of the problem. Report this message to your technical support representative.

Error Message

%CCA-3-RLP1: Invalid rlp flags [hex]

Explanation The adapter requested the CIP to reset a logical path, but the flags on the reset request were not valid. This is an internal logic error.

Recommended Action The CIP recovered, but software development personnel should be notified of the problem. Report this message to your technical support representative.

Error Message

%CCA-3-RLP2: RLP received for undefined path [hex]

Explanation The adapter requested the CIP to reset an undefined logical path. This is an internal logic error.

Recommended Action The CIP recovered, but software development personnel should be notified of the problem. Report this message to your technical support representative.

Error Message

%CCA-0-SCBNRDY: Unexpected SCB not ready CCA = [hex] [hex]

Explanation The CIP was notified that an I/O operation was attempted with a storage control block that was marked as not ready. The specified I/O operation should never have a not-ready storage control block. This is a fatal internal logic error.

Recommended Action Report this message to your technical support representative.

Error Message

%CCA-3-SEL_RESET1: Invalid selective reset code [hex]

Explanation The adapter requested that the CIP perform a selective reset, but the request code in the message was not a valid value. This is an internal logic error.

Recommended Action The CIP recovered, but software development personnel should be notified of the problem. Report this message to your technical support representative.

Error Message

`%CCA-3-SEL_RESET2: Selective reset received for undefined path [hex]`

Explanation The adapter requested the CIP to perform a selective reset on an undefined logical path. This is an internal logic error.

Recommended Action The CIP recovered, but software development personnel should be notified of the problem. Report this message to your technical support representative.

Error Message

`%CCA-3-STATUS_NOTICE: Undefined status notice request code [hex]`

Explanation The adapter notified the CIP that status was accepted by the channel, but the request code in the status message was not a valid code. This is an internal logic error.

Recommended Action The CIP recovered, but software development personnel should be notified of the problem. Report this message to your technical support representative.

Error Message

`%CCA-3-SYS_RESET: Invalid system reset code [hex]`

Explanation The adapter requested that the CIP perform a system reset, but the request code in the message was not a valid value. This is an internal logic error.

Recommended Action The CIP recovered, but software development personnel should be notified of the problem. Report this message to your technical support representative.

Error Message

`%CCA-3-WRAPPLUG: Wrap plug is installed on port [dec]`

Explanation The wrap plug is installed on the PCA in the specified port. The PCA can not be used unless connected to a channel.

Recommended Action Remove the wrap plug and connect the channel cables.

Error Message

%CCA-0-WRITE_FAIL: Write of response CCA failed

Explanation The adapter requested the CIP to perform a request. When the CIP tried to present the response to the request, it could not write to the common communication area. This is a fatal internal logic error.

Recommended Action Report this message to your technical support representative.

CIP-CLAW Error Messages

CIP error messages related to the Common Link Access for Workstations (CLAW) facility

Error Message

`%CLAW-0-BADHAPPL: Host appl. names do not match. Host is [chars].
Control Unit is [chars]`

Explanation An attempt was made to establish a connection, but the host application name specified on the host does not match the host application name specified in the router configuration.

Recommended Action Correct the host and/or router configuration.

Error Message

`%CLAW-0-BADHNAME: Host system names do not match.Host is [chars].
Control Unit is [chars].`

Explanation During the system validate processing, the host name configured in the router did not match the host name configured on the host.

Recommended Action Correct the host and/or router configuration.

Error Message

`%CLAW-0-BADRSIZE: Host read frame size of [dec] is less than Control
Unit size of [dec].`

Explanation The host is configured to receive frames that are smaller than the CIP is designed to send. The CIP notified the host of the problem.

Recommended Action Reconfigure the frame size on the host to be 4096 or larger.

Error Message

%CLAW-6-BADSVR: System Validate Response had a return code of [dec]

Explanation The host generated a bad return code in the response to the system validate request sent by the CIP.

Recommended Action Check the return code and correct the configuration as appropriate.

Error Message

%CLAW-0-BADVERSION: Host CLAW version [dec] does not equal control unit version [dec]

Explanation The version specified in a message from the host is not the same as the version specified in the CIP.

Recommended Action Report this error to your technical support representative.

Error Message

%CLAW-0-BADWAPPL: Workstation appl. names do not match.Host is [chars]. Control Unit is [chars].

Explanation An attempt was made to establish a connection, but the work station application name specified on the host does not match the work station application name specified in the router configuration.

Recommended Action Correct the host and/or router configuration.

Error Message

%CLAW-0-BADWNAME: Workstation system names do not match.Host is [chars]. Control Unit is [chars].

Explanation During the system validate processing, the work station name configured in the router did not match the work station name configured on the host.

Recommended Action Correct the host and/or router configuration.

Error Message

`%CLAW-0-BADWSIZE: Host write frame size of [dec] is greater than Control Unit size of [dec]`

Explanation The host is configured to write more data in a single frame to the CIP than the CIP is designed to receive. The CIP notified the host of the problem.

Recommended Action Reconfigure the frame size on the host to be 4096 or smaller.

Error Message

`%CLAW-6-COMMAND: Unrecognized CLAW command code [dec].xfer_element = [hex]`

Explanation The host sent a CLAW command with an invalid CLAW command code. The CIP ignored the request.

Recommended Action Report this error to your technical support representative.

Error Message

`%CLAW-6-NOCONN: Channel wrote data on link [dec] without a valid connection. Path=[hex] device=[hex]`

Explanation A packet was received from the host but the logical link specified with the data does not represent a valid connection. The packet was dropped.

Recommended Action Report this error to your technical support representative.

Error Message

`%CLAW-0-NOLINKID: Unable to allocate link id.`

Explanation An attempt was made to allocate a link ID to assign to a connection request, but all link IDs were in use. The CIP recovered by generating a bad return code to the requester.

Recommended Action Report this error to your technical support representative.

Error Message

%CLAW-6-NOTPRESENT: Link [dec] being freed was not present

Explanation The host software attempted to disconnect a link that was not established. The CIP ignored the request.

Recommended Action Report this error to your technical support representative.

Error Message

%CLAW-6-NOTXBUF: Unable to allocate txbuf

Explanation No available transmit buffers exist, but the CLAW connection did not reach its transmit buffer limit. The packet was dropped.

Recommended Action Report this error to your technical support representative.

Error Message

%CLAW-6-RANGE: Link [dec] being freed is out of range

Explanation The link ID in a disconnect is not in the valid range for all CLAW links. The CIP recovered by ignoring this request.

Recommended Action Report this error to your technical support representative.

Error Message

%CLAW-6-TYPE: Unrecognized type code [dec] in CLAW. xfer_element = [hex]

Explanation The request type in a transfer element is not a valid value. This is an internal logic error. The CIP recovered by ignoring the transfer element.

Recommended Action Report this error to your technical support representative.

Error Message

`%CLAW-6-UNEXPECTED: Unexpected type code [dec] in CLAW. xfer_element = [hex]`

Explanation The request type in a transfer element is valid but is not expected to occur at this time. This is an internal logic error. The CIP recovered by ignoring the transfer element.

Recommended Action Report this error to your technical support representative.

CIP-CONFIG Error Messages

CIP error messages related to the configuration facility

Error Message

`%CONFIG-6-BAD_DBTYPE: Bad port type [dec]`

Explanation The port type function returned an invalid port type. This is an internal logic error.

Recommended Action Report this message to your technical support representative.

Error Message

`%CONFIG-6-BADCONFIG: Bad configuration type [dec] in update_tx_max`

Explanation The router encountered an unrecognized configuration type when it attempted to update the maximum number of transmit buffers to be used by a device. This is an internal logic error.

Recommended Action Report this message to your technical support representative.

Error Message

`%CONFIG-6-BADDEVT: Bad device type [dec]`

Explanation The device type specified by the route processor in a configuration request is not a valid device type. This is an internal logic error. The configuration request was ignored.

Recommended Action Report this message to your technical support representative.

Error Message

`%CONFIG-0-BADSPEED: Incorrect PCA speed passed to cbus attention exit routine.`

Explanation The router attempted to configure a PCA adapter with an invalid channel speed.

Recommended Action The CIP recovered by ignoring the request. Report this error to your technical support representative.

Error Message

`%CONFIG-3-BADVCN: Virtual circuit number [dec] too large`

Explanation The virtual circuit number specified by the route processor on a configuration request is too large. This is an internal logic error. The configuration request was ignored.

Recommended Action Report this message to your technical support representative.

Error Message

`%CONFIG-3-BADVCN2: Bad vcn [dec] ([hex]), port adapter [dec].`

Explanation A packet was queued for the CIP with an invalid virtual circuit number.

Recommended Action The CIP recovered by dropping the packet. Report this error to your technical support representative.

Error Message

`%CONFIG-3-CLAWDEV: CLAW device address ([hex]) must be even`

Explanation The route processor attempted to configure an odd address for a CLAW device. CLAW configuration requests must specify an even address. This is an internal logic error. The configuration request was ignored.

Recommended Action Report this message to your technical support representative.

Error Message

%CONFIG-3-DIFFDEVT: Device type [dec] does not match device [hex]
device type [dec]

Explanation The route processor attempted to reconfigure an existing device without first removing the device. This is an internal logic error. The original configuration remains.

Recommended Action Report this message to your technical support representative.

Error Message

%CONFIG-3-DUPDEV: Duplicate device address ([hex])

Explanation The route processor attempted to configure an existing device. This is an internal logic error. The configuration request was ignored.

Recommended Action Report this message to your technical support representative.

Error Message

%CONFIG-3-DUPVCN: Virtual circuit number already in use. Path = [hex]
[hex] [hex] Device = [hex]

Explanation The route processor attempted to configure a device using a virtual circuit number that was already in use by another device. This is an internal logic error. The configuration request was ignored.

Recommended Action Report this message to your technical support representative.

Error Message

%CONFIG-3-NOAPPLESPC: Error allocating storage for application block

Explanation The CIP does not have sufficient storage to allocate an application block. The configuration request was ignored.

Recommended Action Purchase the next larger storage size for the CIP or configure fewer devices.

Error Message

%CONFIG-3-NOGUI: Control unit image does not exist for [hex] [hex]
[hex]

Explanation The route processor attempted to unconfigure a device, but the control unit image for the device could not be located. This is an internal logic error. The unconfigure request was ignored.

Recommended Action Report this message to your technical support representative.

Error Message

%CONFIG-3-NODEV: Device [hex] is not defined.

Explanation The route processor attempted to unconfigure a device, but the device was not defined. This is an internal logic error. The unconfigure request was ignored.

Recommended Action Report this message to your technical support representative.

Error Message

%CONFIG-3-NODEVSPC: Error allocating storage for device block

Explanation No storage was available for the device block. The configuration request is ignored.

Recommended Action Purchase the next larger storage size for the CIP or configure fewer devices.

Error Message

%CONFIG-3-NOFREEPATH: No free paths - only 64 may be specified

Explanation An attempt was made to configure more than 64 different paths. Only 64 paths are supported. The configuration request was ignored.

Recommended Action Configure fewer paths.

Error Message

%CONFIG-3-NOPATHSPC: Error allocating storage for logical path table

Explanation No storage was available for the logical path table. The configuration request was ignored.

Recommended Action Purchase the next larger storage size for the CIP or configure fewer devices.

Error Message

%CONFIG-3-NOVCN: Virtual circuit number [dec] is not defined

Explanation The route processor attempted to unconfigure a device, but the virtual circuit number for the device is not defined. This is an internal logic error. The unconfigure request was ignored.

Recommended Action Report this message to your technical support representative.

Error Message

%CONFIG-3-TOOMANYDEV: Too many devices defined. Only 256 may be used.

Explanation An attempt was made to define more than 256 devices. Only 256 devices are supported on an adapter. The configuration request was ignored.

Recommended Action Configure fewer devices.

Error Message

%CONFIG-3-WORKLEFT: Work pending on work queue when device terminated.

Explanation Work was pending when the router finished processing an unconfigure request. This is an internal logic error.

Recommended Action Report this message to your technical support representative.

Error Message

%CONFIG-3-WRONGINT: VCN [dec] ([hex]) not for port adapter [dec].

Explanation A packet was queued for the CIP with a valid virtual circuit number, but the virtual circuit number is associated with the other port adapter.

Recommended Action The CIP recovered by dropping the packet. Report this error to your technical support representative.

CIP-DIAG Error Message

CIP error message for diagnostic processing

Error Message

%DIAG-6-BADCODE: Invalid request code [dec] to run_diag

Explanation A request was made to run an ESCON Channel Adapter (ECA) diagnostic, but the number of the diagnostic to run was not valid. This is an internal logic error. The request to run the diagnostic is ignored.

Recommended Action Report this message to your technical support representative.

CIP-DMA Error Messages

Error messages for the function on the CIP that is responsible for transferring data between the DRAM on the CIP and MEMD

Error Message

`%DMA-3-CBUSERR: CBUS error (no ACK neither NACK) [hex]`

Explanation The cBus controller started a read or write operation and did not receive a response from the CBUS indicating the completion status. The packet was dropped.

Recommended Action Report this error to your technical support representative.

Error Message

`%DMA-3-CBUSPARITY: CBUS parity error [hex]`

Explanation A parity error was detected on the cBus during a data transfer. The packet was dropped.

Recommended Action Report this error to your technical support representative.

Error Message

`%DMA-4-DATAPARITY: DMA Data FPGA parity error [hex]`

Explanation A parity error was detected during data transfer. The packet was dropped.

Recommended Action Report this error to your technical support representative.

Error Message

`%DMA-0-INCOMPL: DMA transfer incomplete on interrupt`

Explanation The CIP was notified that the current DMA transfer had completed, but the DMA status register indicated the transfer was still in progress. The CIP restarted.

Recommended Action Report this error to your technical support representative.

Error Message

%DMA-3-LOGICERR:CBUS timeout (10 us) [hex]

Explanation The CBUS did not respond to the DMA controller within 10 microseconds (10 μ s). The packet was dropped.

Recommended Action Report this error to your technical support representative.

Error Message

%DMA-0-NOXFER: No transfer pending on DMA interrupt

Explanation A DMA interrupt occurred, but no transfer was pending. This is either an internal logic error or a hardware failure. The CIP restarted.

Recommended Action Report this error to your technical support representative.

CIP-GET_DATA Error Message

CIP error messages related to the internal routine for allocating transfer elements

Error Message

`%GET_DATA-0-NOMEMORY: Can not allocate storage for xfer elements`

Explanation An attempt was made to allocate a transfer element and no storage was available. This is a fatal error. The CIP restarted.

Recommended Action Report this error to your technical support representative.

CIP-INT Error Messages

CIP error messages for the interrupt handler interface

Error Message

`%INT-0-ADDFAST: Add: Invalid fast io code [dec]`

Explanation A request was made to add an interrupt handler to the fast I/O path with an invalid interrupt type. This is a fatal internal logic error.

Recommended Action Report this error to customer engineering.

Error Message

`%INT-0-ADDFLIH: Add: Invalid interrupt code [dec]`

Explanation A request was made to add an interrupt handler with an invalid interrupt number. This is a fatal internal logic error.

Recommended Action Report this error to customer engineering.

Error Message

%INT-0-ADDFULL: Add: Invalid full io code [dec]

Explanation A request was made to add an I/O interrupt handler with an invalid interrupt code. This is a fatal internal logic error.

Recommended Action Report this error to customer engineering.

Error Message

%INT-0-ADDTRAP: Add: Invalid trap code [dec]

Explanation A request was made to add a system call handler with an invalid system call number. This is a fatal internal logic error.

Recommended Action Report this error to customer engineering.

Error Message

%INT-0-REMOVEFAST: Remove: Invalid fast io code [dec]

Explanation A request was made to remove an interrupt handler from the fast I/O path with an invalid interrupt type. This is a fatal internal logic error.

Recommended Action Report this error to customer engineering.

Error Message

%INT-0-REMOVEFLIH: Remove: Invalid interrupt code [dec]

Explanation A request was made to remove an interrupt handler with an invalid interrupt number. This is a fatal internal logic error.

Recommended Action Report this error to customer engineering.

Error Message

%INT-0-REMOVEFULL: Remove: Invalid full io code [dec]

Explanation A request was made to remove an I/O interrupt handler with an invalid interrupt code. This is a fatal internal logic error.

Recommended Action Report this error to customer engineering.

CIP-LOVE Error Message

Error Message

`%INT-0-REMOVETRAP: Remove: Invalid trap code [dec]`

Explanation A request was made to add a system call handler with an invalid system call number. This is a fatal internal logic error.

Recommended Action Report this error to customer engineering.

CIP-LOVE Error Message

CIP error messages related to the mechanism that sends statistics from the CIP to the router.

Error Message

`%LOVE-3-LOVELETTER: Error in love letter processing`

Explanation An attempt was made to transfer statistics to the Route Processor (RP). The DMA routines returned the wrong transfer request. The CIP recovered.

Recommended Action Report this error to your technical support representative.

CIP-MEMD Error Message

CIP error message related to the MEMD facility

Error Message

`%MEMD-3-BADVCN: Bad vcn [dec] ([hex]), daughter board [dec]`

Explanation A packet was queued to the CIP and the virtual circuit associated with the packet is not valid. The CIP dropped the packet.

Recommended Action Report this error to your technical support representative.

CIP-NEVADA Error Messages

Error messages related to the CIP interrupt controller

Error Message

`%NEVADA-0-BADADD: Add: Invalid nevada interrupt code[dec]`

Explanation An attempt was made to specify an interrupt handler for an invalid interrupt type on the nevada interrupt control chip. This is a fatal internal logic error.

Recommended Action Report this error to your technical support representative.

Error Message

`%NEVADA-0-BADDISABLE: Disable: Invalid nevada interrupt code [dec]`

Explanation An attempt was made to disable an invalid interrupt type on the nevada interrupt control chip. This is a fatal internal logic error.

Recommended Action Report this error to your technical support representative.

Error Message

`%NEVADA-0-BADENABLE: Enable: Invalid nevada interrupt code [dec]`

Explanation An attempt was made to enable an invalid interrupt type on the nevada interrupt control chip. This is a fatal internal logic error.

Recommended Action Report this error to your technical support representative.

Error Message

`%NEVADA-0-BADENABLE2: Enable: No interrupt routine for code [dec]`

Explanation An attempt was made to enable an interrupt routine on the nevada interrupt control chip, but there was not interrupt routine specified. This is a fatal internal logic error.

Recommended Action Report this error to your technical support representative.

Error Message

`%NEVADA-0-BADINT: Interrupt received with no interrupt routine defined`

Explanation An interrupt was received for a code with no interrupt handler defined. This is a fatal internal logic error.

Recommended Action Report this error to your technical support representative.

Error Message

`%NEVADA-0-BADREMOVE: Remove: Invalid nevada interrupt code [dec]`

Explanation An attempt was made to remove an interrupt handler for an invalid interrupt type on the nevada interrupt control chip. This is a fatal internal logic error.

Recommended Action Report this error to your technical support representative.

CIP-SCB Error Message

CIP error messages related to the storage control block

Error Message

`%SCB-6-BADSCB: Request to free SCB 0 ignored`

Explanation An attempt was made to free SCB 0. This is an internal logic error. The request was ignored.

Recommended Action Report this message to your technical support representative.

CIP-SCHED Error Messages

Error messages related to the scheduler, the facility responsible for determining which process to run at a given time on the CIP

Error Message

`%SCHED-0-BADPRIORITY: Task priority of [dec] is not allowed`

Explanation A request was made to create a process, but the priority for the process was not valid. The process was not created.

Recommended Action Report this error to your technical support representative.

Error Message

`%SCHED-0-INVLOCK1: Invalid lock word of [dec] used in lock request`

Explanation An attempt was made to request a lock, but the lock word contained invalid data. This is a fatal internal logic error.

Recommended Action Report this error to your technical support representative.

Error Message

`%SCHED-0-INVLOCK2: Invalid lock word of [dec] used in unlock request`

Explanation An attempt was made to unlock a lock, but the data in the lock word was not valid. This is a fatal internal logic error.

Recommended Action Report this error to your technical support representative.

Error Message

`%SCHED-0-NMLDATA: tcb_addr = [hex] current_tcb = 0x%8x lock_value = [dec];`

Explanation This message contains data that relates to the SCHED-0-NOTMYLOCK message.

Recommended Action Report this error to your technical support representative.

Error Message

`%SCHED-0-NOLOCK: Attempt was made to unlock resource that wasn't locked`

Explanation An attempt was made to unlock a lock that was not held. This is a fatal internal logic error.

Recommended Action Report this error to your technical support representative.

Error Message

`%SCHED-0-NOPROCID: No process id available for task creation`

Explanation An attempt was made to create more tasks than the CIP is designed to allow. The process was not created.

Recommended Action Report this error to your technical support representative.

Error Message

`%SCHED-0-NOSTACK: Could not allocate [dec] bytes for stack from SRAM`

Explanation An attempt was made to create a process and there was not sufficient storage available to contain the stack for the process. The process was not created.

Recommended Action Report this error to your technical support representative.

Error Message

`%SCHED-0-NOTCB: Could not allocate [dec] bytes for tcb from SRAM`

Explanation An attempt was made to create a process and there was not sufficient storage available to contain the control block for the process. The process was not created.

Recommended Action Report this error to your technical support representative.

Error Message

`%SCHED-0-NOTMYLOCK: Attempt was made to unlock another tasks
resource`

Explanation An attempt was made to unlock a lock that was set by another task. This is a fatal internal logic error.

Recommended Action Report this error to your technical support representative.

Error Message

`%SCHED-2-SEMUNLOCK: [chars] attempted to unlock semaphore owned by
[chars], 30*ONESEC`

Explanation A software error occurred.

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

CIP-SLC Error Messages

CIP error messages related to the serial link controller

Error Message

`%SLC-3-SCANEP1: Scan of EP ring 1 failed`

Explanation An attempt to scan the first set of internal latches on the ESCON processor failed.

Recommended Action Report this message to your technical support representative.

Error Message

`%SLC-3-SCANEP2: Scan of EP ring 2 failed`

Explanation An attempt to scan the second set of internal latches on the ESCON processor failed.

Recommended Action Report this message to your technical support representative.

Error Message

`%SLC-3-SCANSLC: Scan of SLC ring failed`

Explanation An attempt to scan the internal latches of the serial link controller failed.

Recommended Action Report this message to your technical support representative.

Error Message

`%SLC-3-STOPBIDITO: Stop BIDI clock timed out`

Explanation An attempt was made to stop the clock on the interface between the Enterprise Systems Connection (ESCON) processor and the serial link controller. The serial link controller did not indicate that the clock was stopped.

Recommended Action Report this message to your technical support representative.

Error Message

`%SLC-3-STOPEPTO: Stop EP clock timed out`

Explanation An attempt was made to stop the clock on the ESCON processor. The serial link controller did not indicate that the clock was stopped. The CIP attempted to stop the BIDI clock.

Recommended Action Report this message to your technical support representative.

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 Call your technical support representative for assistance.

CLNS Error Messages

OSI Connectionless Network Service error messages

Error Message

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

Explanation Intermediate System-to-Intermediate system (IS-IS) 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]),
MSGDEF_LIMIT_SLOW`

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

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

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

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

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

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 Call your technical support representative for assistance.

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.

CLS Error Message

Cisco Link Services error message

Error Message

%CLS-3-CLSFAIL, MSG_TRACEBACK, CLS: Assertion failed: [chars], MSGDEF_LIMIT_FAST

Explanation A software or hardware error occurred.

Recommended Action Call your technical support representative for assistance.

CLSDR Error Messages

Cisco Link Services Driver error messages

Error Message

`%CLSDR-3-ERRRTN: [chars] failed error 0x[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-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 0x[hex] not on list`

Explanation The destination logical unit (DLU) is trying to remove a non-existent 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 0x[hex] not on list`

Explanation The destination logical unit (DLU) is trying to remove a non-existent 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 Call your technical support representative for assistance.

Error Message

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

Explanation Interface serial0 compression getbuffer failed, causing Link Access Procedures, 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.

CONTROLLER Error Messages

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

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

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

dBus error messages

Error Message

```
%DBUS-3-BADCTRLRTYPE, MSG_TRACEBACK, 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-DBUSTIMOUT, MSG_TRACEBACK, 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 online insertion and removal (OIR) event or microcode download, when it will be retested.

Recommended Action Reinstall the processor or download the microcode. If this message recurs, call your technical support representative for assistance.

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 message recurs, call your technical support representative for assistance. Currently no boards report this error.

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. Call your technical support representative for assistance.

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-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 Call your technical support representative for assistance.

Error Message

`%DBUS-3-SW_NOTRDY, MSG_TRACEBACK, DBUS software not ready after > [chars], elapsed [dec], status 0x[hex], control 0x[hex]`

Explanation An interface processor failed to come on line after being reset. 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-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 Call your technical support representative for assistance.

Error Message

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

Explanation 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 Call your technical support representative for assistance.

Error Message

`%DBUS-3-WCSERR: Slot [dec], WCS controller in error state [hex], resetting`

Explanation The processor in slot [n] reported a WCS controller error. The processor will be reset and new microcode loaded. This error message is encountered only while downloading microcode.

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-WCSLDERR: Slot [dec], error loading WCS, status [hex] cmd/data [hex] pos [dec]`

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

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

Error Message

`%DBus-3-XILINX: ready wait timeout, slot [dec]`

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 Call your technical support representative for assistance.

DIALER Error Messages

Dial-on-demand routing error messages

Error Message

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

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.)

DLC Error Messages

Data-link control error messages

Error Message

`%DLC-3-BADPARAM, MSG_TRACEBACK | MSG_PROCESS, 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.)

DLC Error Messages

Error Message

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

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%DLC-4-OPTNULL, MSG_TRACEBACK | MSG_PROCESS, 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, MSGDEF_LIMIT_FAST

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

DLSw Error Messages

Data-link switching error messages

Error Message

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

%DLSWC-3-BADCLSICNF: [chars] Invalid confirm [chars] [chars]

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

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

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

%DLSWC-3-BADCLSIIND: [chars] Invalid indication [chars] [chars]

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

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

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

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

%DLSWC-3-BADPEEROP: 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 Call your technical support representative for assistance.

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 non-Cisco 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 non-Cisco 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 Call your technical support representative for assistance.

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 Call your technical support representative for assistance.

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-NOEMDLC: No memory to create circuit entry - from dlc

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

Explanation A data-link switching system error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

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

%DLSWC-3-NOPEER, MSG_TRACEBACK, 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-SENDSRP: 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, MSG_TRACEBACK, 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-PGENERAL, MSG_TRACEBACK, 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, MSG_TRACEBACK, 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, MSG_TRACEBACK, 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.

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,
MSGDEF_LIMIT_MEDIUM`

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

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

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 message recurs, call 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 message recurs, call 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 message recurs, call 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 message recurs, call 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 message recurs, call 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 message recurs, call 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 message recurs, call 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 message recurs, call 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 message recurs, call 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 message recurs, call 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 message recurs, call 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 message recurs, call 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 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 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 Negotiation Error, bad byte= [dec], ** bad bit= [dec], sense data= [hex]`

Explanation XID3 with error indication was received from the remote station; connection with remote station could not be established.

Recommended Action Determine which field in XID3 (from bad byte/bit info) is rejected by the remote station and why (from sense data), and correct link station configuration parameters at either the router or the remote station.

Error Message

`%DSPU-3-NotifyNegRsp: LU [dec] received a Notify Neg Rsp 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) DSX1 telephony standard error messages

Error Message

%DSX1-1-NOMEMORY, 0, 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, 0, msgtxt_badencap

%DSX1-3-BADENCAP: Unit [dec], bad encapsulation in idbenctype = [hex]

Explanation An internal software error occurred.

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

DUAL Error Messages

Enhanced Interior Gateway Protocol error messages

Error Message

`%DUAL-3-BADCOUNT, MSG_TRACEBACK, Route [chars], [dec] successors,
[dec] rdfs`

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

`%DUAL-3-BADSUMNOTIFY: Dual notified us about summary [chars]`

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

`%DUAL-6-EVENT: [chars], [chars]`

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

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 Call your technical support representative for assistance.

Error Message

%DUAL-3-LINKSTILLUP: Link [dec] [chars] still exists on [chars]

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%DUAL-3-NOBUFFER: No buffers available for [dec] byte packet,
MSGDEF_LIMIT_SLOW

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 Call your technical support representative for assistance.

Error Message

%DUAL-3-NOMATCH: Nexthop and infosource don't match. N = [chars]

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%DUAL-3-NOMEMORY: No memory available for [chars]

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

DUAL Error Messages

Error Message

%DUAL-3-NOSOCKET: Unable to open socket for AS [dec]

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

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 Call your technical support representative for assistance.

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 Call your technical support representative for assistance.

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 message recurs, call 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 Call your technical support representative for assistance.

ENV Error Messages

Environmental monitor card error messages for AGS+

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.

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. Call your technical support representative for assistance.

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, 0, msgtxt_nomemory

Explanation Insufficient memory exists to allocate the necessary memory pools.

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

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 Call your technical support representative for assistance.

Error Message

%FDDI-3-FDDIRSETU: Unit [dec], Error ([char]-04x)
[chars] - fddi_reset()

Explanation FDDI-related command execution failure.

Recommended Action Call your technical support representative for assistance.

Error Message

%FDDI-3-NOCAM: Unit [dec], No CAM exists for this interface.

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%FDDI-1-NOMEMORY, 0, msgtxt_nomemory, MSGDEF_LIMIT_SLOW

Explanation The FDDI Management Information Base/Station Management (MIB/SMT) processing functions could not initialize due to insufficient memory.

Recommended Action Call your technical support representative for assistance.

FDDISTAT Error Message

FDDI state error message

Error Message

%FDDISTAT-4-STATUS: FDDI state [chars] detected on interface [chars]

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

FILESYS Error Messages

Personal Computer Memory Card International Association (PCMCIA) Flash card error messages

FLASH Error Messages

Error Message

`%FILESYS-5-PCMCIA_INSERT: PCMCIA flash card is inserted into [chars]`

Explanation A Flash card was just inserted into slot0 or slot1.

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 card was just pulled out of slot0 or slot1.

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 non-volatile memory error messages

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 Message

Frame Relay error message

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 Call your technical support representative for assistance.

GRIP Error Messages

XNS Routing Protocol error messages

Error Message

%GRIP-3-BADPATHS: Invalid number of paths [dec] for [dec]

Explanation An internal inconsistency was detected in the XNS routing table structure.

Recommended Action Note the parameters associated with this message and call your technical support representative for assistance.

Error Message

%GRIP-2-BADROUTE: Error [chars] route - null table

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

HD Error Messages

HD64570 serial controller error messages

Error Message

%HD-3-BADENCAP, 0, msgtxt_badencap

%HD-1-BADENCAP:Unit [dec], bad encapsulation
in idb->enctype = [hex]

%HD-1-BADRING: Bad [chars] ring size

%HD-3-BADUNIT: Bad unit number [dec]

Explanation An internal software error occurred.

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

Error Message

%HD-1-BADLOOPCABLE, 0, msgtxt_badloopcable

Explanation Loopback mode is not allowed when using an X.21 DTE cable on a Quad serial NIM port.

Recommended Action Do not enable loopback, or use a different cable type.

Error Message

%HD-1-BADPORT: [chars]

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%HD-1-BADPORTADAPTER: [chars]

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%HD-0-INITFAIL: Unit [dec], initialization timeout failure, csr[dec]=[hex]

Explanation The hardware failed to initialize correctly.

Recommended Action Repair or replace the controller.

Error Message

%HD-5-LINEFLAP: Unit [dec] excessive modem control changes

Explanation Too many modem control interrupts have been received. The port was disabled to prevent excessive use of the CPU.

Recommended Action Check the cable on the serial port.

Error Message

%HD-1-MEMERR: Unit [dec], memory error, csr0 = [hex]

Explanation A network serial interface detected a hardware problem.

Recommended Action Repair or replace the controller.

Error Message

%HD-1-NOMEMOR, 0, msgtxt_nomemory, MSGDEF_LIMIT_SLOW

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

%HD-0-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

%HD-3-ODDSTART: Interface [chars], Odd datagram
start = [hex], pak =[hex]

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

Explanation An internal software error occurred.

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

Error Message

%HD-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 controller.

HUB Error Messages

Cisco Ethernet hub error messages

Error Message

%HUB-1-BADHUB: Invalid hub type [dec] and number [dec]

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%HUB-1-BADUNIT: Bad port number [dec]

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%HUB-1-NOMEMORY, 0, msgtxt_nomemory, MSGDEF_LIMIT_SLOW

Explanation The system detected that there is not enough memory for the hub initialization.

Recommended Action If conditions warrant, upgrade to larger memory configuration.

Error Message

%HUB-1-READERR: Read op [dec] not allowed

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%HUB-1-WRITEERR: Write op [dec] not allowed

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

IBM2692 Error Messages

Error Message

%IBM2692 -1-ADP_CHK: msg_adaptor_check

Explanation Indicates a hardware failure. The port is disabled.

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

Error Message

%IBM2692-1-ICDB_PERROR: msg_icdb_perror

Explanation Indicates a hardware failure.

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

Error Message

%IBM2692-1-INITFAIL: msg_initfail

Explanation Indicates a hardware failure. The port failed to initialize.

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

Error Message

%IBM2692-1-NOPCIMEMORY: msg_nopcimemory

Explanation Could not allocate memory for the descriptors.

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

Error Message

%IBM2692-1-NOSYSMEMORY: msg_nosysmemory

Explanation Ran out of system memory.

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

Error Message

%IBM2692-1-PCI_PERROR: msg_pci_perror

Explanation The PCI bus failed.

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

Error Message

%IBM2692-1-RX_HALT: msg_rx_halt

Explanation The RX channel has shut down.

Recommended Action The software should recover, record the message for later reference.

IGRP Error Message

Interior Gateway Routing Protocol error message

Error Message

%IGRP-3-NOSOCKET: Unable to open socket for AS [dec]

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.

IP Error Messages

Internet Protocol error messages

Error Message

```
%IP-3-BADIPALIGN: Invalid alignment in packet for IP. [chars]=[hex]
```

Explanation The packet data structure is misaligned. This condition may result in a small amount of overhead in processing IP traffic.

Recommended Action Enter a **show hardware** command and report the output, along with this error message, to your technical support representative.

Error Message

```
%IP-3-BADSRROUTE: Improper source route. Length [dec] Ptr [dec]
```

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

```
%IP-4-CLASS: Bad IP address [inet] and mask [inet]  
in class_resolve()
```

```
%IP-3-DESTHOST: src=[inet], dst=[inet], NULL desthost
```

Explanation An internal software error occurred.

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

Error Message

```
%IP-4-DUPADDR: Duplicate address [inet] on [chars],  
sourced by [enet]
```

Explanation Another system is using your IP address.

Recommended Action Change the IP address of one of the two systems.

IPC Error Messages

Interface processor chassis error messages

Error Message

`%IPC-2-CONSISTENCY, MSG_TRACEBACK, Message failed consistency check:
[chars]`

Explanation An internal inconsistency was found in some IPC data structures.

Recommended Action Informational message only. No action required.

Error Message

`%IPC-2-DELETED, MSG_TRACEBACK, Attempt to delete an IPC message
(0x[hex]) a second time., MSGDEF_LIMIT_FAST`

Explanation An internal inconsistency was found in some IPC data structures.

Recommended Action Informational message only. No action required.

Error Message

`%IPC-2-LOCK, MSG_TRACEBACK, Lock done a deleted element`

Explanation An internal inconsistency was found in some IPC data structures.

Recommended Action Informational message only. No action required.

Error Message

`%IPC-5-NODELFUNC: Delayed init function not available`

Explanation The IPC application can not be initialized due to the absence of its initialization function in the initialization function list of IPC.

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

Error Message

%IPC-2-NODISPATCH: Message from [dec].[dec] has no receive queue or dispatch routine., MSGDEF_LIMIT_FAST

Explanation IPC user failed to provide any means of handling received message.

Recommended Action Informational message only. No action required.

Error Message

%IPC-2-ONINT, MSG_TRACEBACK, Called from interrupt level: [chars], MSGDEF_LIMIT_FAST

Explanation IPC user attempted a prohibited call into IPC while running on the interrupt stack.

Recommended Action Informational message only. No action required.

Error Message

%IPC-5-SLAVELOG: VIP-SLOT[dec] [chars]

Explanation The Cisco IOS software, running on a VIP card, generated this message. The error message has been passed up to the RP/RSP for display. This message is seen only if the user has configured **service slavelog**.

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

Error Message

%IPC-2-UNLOCK, MSG_TRACEBACK, Unlock done on already unlocked element.

Explanation An internal inconsistency was found in some IPC data structures.

Recommended Action Informational message only. No action required.

IPFAST Error Messages

IP fast-switching error messages

Error Message

```
%IPFAST-2-BADIF: No support available for interface [chars]  
(programming error), 30*ONESEC
```

Explanation A programming error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

```
%IPFAST-7-INTLEV, MSG_TRACEBACK, Cache update request at interrupt  
level: [inet]([chars])->[inet]([chars]), 5*ONESEC
```

Explanation A programming error occurred.

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

Error Message

```
%IPFAST-6-INVALIDATE, MSG_TRACEBACK | MSG_PROCESS, Cache  
invalidation occurring for [chars], ONESEC
```

Explanation The system is invalidating all cache entries for a given interface.

Recommended Action Informational message only. No action required.

Error Message

```
%IPFAST-6-INVALREQ, MSG_TRACEBACK | MSG_PROCESS, Cache invalidation  
request for [chars]
```

Explanation The system is invalidating all cache requests for a given interface.

Recommended Action Informational message only. No action required.

Error Message

`%IPFAST-4-RADIXDELETE, MSG_TRACEBACK | MSG_PROCESS, Error trying to delete prefix entry for [dec] [dec] (expected [hex], got [hex])`

Explanation A debugging message related to problems with the IP route cache. The router should correct for this error.

Recommended Action Informational message. No action required. If you're still having problems though (ie the router can't forward packets properly), copy the error message exactly as it appears and report it to your technical support representative.

Error Message

`%IPFAST-2-RADIXINIT: Error initializing IP fast cache structures`

Explanation A programming error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

`%IPFAST-4-RADIXINSERT, MSG_TRACEBACK | MSG_PROCESS, Error trying to insert prefix entry for [dec] [dec] (expected [hex], got [hex])`

Explanation A debugging message related to problems with the IP route cache. The router should correct for this error.

Recommended Action Informational message. No action required. If you're still having problems though (ie the router can't forward packets properly), copy the error message exactly as it appears and report it to your technical support representative.

Error Message `%IPFAST-3-SANITY, MSG_PROCESS, Found existing [chars] specific entry [dec] [ip mask]..[ipmask]->[dec] ([chars]) when "attempting to create [dec] [ipmask]..[ipmask]->[dec] ([chars])`

Explanation A debugging message related to problems with the IP route cache. The router should correct for this error.

Recommended Action Informational message. No action required. If you're still having problems though (ie the router can't forward packets properly), copy the error message exactly as it appears and report it to your technical support representative.

IPRT Error Messages

Internet Protocol routing error messages

Error Message

```
%IPRT-3-BADCOMLIST, MSG_PROCESS | MSG_TRACEBACK, Community list  
check with bad list [dec], 10*ONESEC
```

Explanation A user specified an invalid BGP community list number.

Recommended Action Check the system configuration to make sure that the community list specified falls within the valid range.

Error Message

```
%IPRT-2-COMPRESS: Bad route_compress() call, sdb= [hex]
```

Explanation An internal software error occurred.

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

Error Message

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

Explanation The requested operation failed because of a low memory condition.

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

Error Message

%IPRT-3-PATHIDX, MSG_PROCESS | MSG_TRACEBACK, Bad path index of [dec] for [inet], [dec] max, ONEMIN

Explanation A software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%IPRT-3-TOOMANYNETS: Too many networks in [char] [dec] (limit [dec])

Explanation Too many **network** subcommands have been entered for this routing protocol.

Recommended Action Advisory message only. No action required.

IPX Error Messages

Internetwork Packet Exchange error messages

Error Message

`%IPX-3-BADCOUNT: Bad IPX server count. [chars] [dec], [chars] [dec]`

Explanation The internal SAP service count does not match the number of services currently present and displayed by the **show ipx servers** command.

Recommended Action You can report the problem to your technical support representative, but no corrective action is necessary.

Error Message

`%IPX-3-BADIGRPSAP: Cannot send incremental SAP update to peer on interface [chars]. Increase buffers or increase output-sap-delay.`

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

`%IPX-3-BADIGRPSATYPE: Unsupported SAP type for EIGRP being [chars]
- type [hex]`

Explanation An unsupported SAP type was detected.

Recommended Action Call your technical support representative for assistance.

Error Message

`%IPX-3-BADPATHS: Invalid number of paths [dec] for [hex]`

Explanation An internal inconsistency was detected in the IPX routing table structure.

Recommended Action Note the parameters associated with this message. If possible, clear the IPX routing table by issuing the **clear ipx route** command. (This will result in lost connectivity until the routing table is rebuilt.) If the message recurs, note the parameters and call your technical support representative for assistance.

Error Message

%IPX-3-NOMEMORY: Unable to allocate memory for [event]

Explanation The system failed to allocate memory for an event. The event variable will be one of the following procedures which attempts to allocate memory:

- SAP queue
- routing table
- SAP update
- SAP update queue entry
- RIP update queue entry
- SAP heap sort
- pointer array
- RIP update
- EIGRP process
- route entry

Recommended Action Call your technical support representative for assistance.

LANCE Error Messages

LANCE Ethernet interface error messages

Error Message

%LANCE-4-BABBLE: Unit [dec], babble error, csr0 = [hex]

Explanation An Ethernet interface is malfunctioning.

Recommended Action Repair or replace the controller.

Error Message

%LANCE-3-BADENCAP: Unit [dec], bad encapsulation in idbenctype = [hex]

%LANCE-3-BADUNIT: Bad unit number [dec]

Explanation An internal software error occurred.

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

Error Message

%LANCE-5-COLL: Unit [dec], excessive collisions.
TDR=[dec]

Explanation An Ethernet cable is broken or unterminated, or the transceiver is unplugged. The time delay reflectometer (TDR) counter is an internal LANCE counter that counts the time (in “ticks” of 100 ns each) from the start of a transmission to the occurrence of a collision. Because a transmission travels about 35 feet per tick, this value is useful to determine the approximate distance to a cable fault.

Recommended Action If the transceiver appears to be properly terminated, repair or replace the Ethernet interface card.

Error Message

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

Explanation The hardware failed to initialize correctly.

Recommended Action Repair or replace the controller.

Error Message

%LANCE-5-LATECOLL: Unit [dec], late collision error

Explanation An Ethernet transceiver is malfunctioning, the Ethernet is overloaded, or the Ethernet cable is too long.

Recommended Action Repair or replace the controller.

Error Message

%LANCE-5-LOSTCARR: Unit [dec], lost carrier. Transceiver problem?

Explanation An Ethernet transceiver is unplugged or faulty.

Recommended Action Repair or replace the controller.

Error Message

%LANCE-1-MEMERR: Unit [dec], memory error, csr0 = [hex]

Explanation An Ethernet interface detected a hardware problem.

Recommended Action Repair or replace the controller.

Error Message

%LANCE-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.

LANE Error Messages

Error Message

%LANCE-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 controller.

Error Message

%LANCE-3-SPURIDON: Unit [dec], spurious IDON interrupt

Explanation An Ethernet interface generated a spurious Initialization Done interrupt.

Recommended Action Repair or replace the controller.

Error Message

%LANCE-3-UNDERFLO: Unit [dec], underflow error

Explanation The data transfer rate is exceeding the limitations of the router.

Recommended Action Reduce or eliminate access lists, reduce the number of users on the Ethernet segment, or fast switch (use a route cache to expedite packet switching). If this situation appears to be more than bursty, it may indicate that your system is handling peak traffic. You may consider upgrading to a higher platform, such as the Cisco C4500. If the error persists, call your technical support representative.

LANE Error Messages

LAN emulation error messages

Error Message

%LANE-3-BADILMI, MSG_TRACEBACK, Unexpected ILMI event [dec]

Explanation An internal error occurred.

Recommended Action This error should not occur. Download the system error log, then call your technical support representative and provide the log, the error message, and the router configuration.

Error Message

%LANE-3-BADNAME: ELAN name must be 1-32 characters long

Explanation An emulation LAN (ELAN) name was entered in a command that is longer than 32 characters. The LAN Emulation standard v1.0 requires a name that is 32 characters or less in length.

Recommended Action Re-enter a shorter name.

Error Message

%LANE-3-BADTYPE: LAN Emulation supports only Ethernet type

Explanation The user specified a Token-Ring-emulated LAN, which is not currently supported.

Recommended Action Specify an Ethernet-emulated LAN. Future software releases will support Token Ring ELANs.

Error Message

%LANE-3-LANE_LESBUS_UP: LES/BUS coming up from previous command

Explanation The **lane server-bus** command was reissued to start the LAN Emulation service components while the router was trying to execute a previously issued **lane server-bus** command.

Recommended Action Wait for the initial **lane server-bus** command to either succeed or fail. The status of the server bus can be checked via the **show lane server-bus interface sub-interface name** command. The previous command can also be cancelled with the **no lane server-bus** command. If these steps fail to clear the problem, issue the **shutdown** command followed by a **no shutdown** command cycle on the subinterface, or on the whole interface. As a last resort, issue the **no interface sub-interface name** command followed by the **shutdown, no shutdown** command cycle.

Error Message

%LANE-3-LANE_SIG_CHAIN, MSG_TRACEBACK, not in [chars] chain ([hex] [hex])

Explanation An internal error occurred while system routines were handling ATM signaling messages for LAN Emulation.

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

Error Message

%LANE-3-LANE_SIG_ERR, MSG_TRACEBACK, [chars]

Explanation An internal error occurred while system routines were handling ATM signaling messages for LAN Emulation.

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

Error Message

%LANE-3-LANE_SIG_INV_MSG: invalid msg received ([hex] [hex] [hex])

Explanation An internal error occurred while system routines were handling ATM signaling messages for LAN Emulation.

Recommended Action Call your technical support representative for assistance.

Error Message

%LANE-3-LANE_SIG_INV_STATE, MSG_TRACEBACK, invalid [chars] req in state [dec] ([hex])

Explanation An internal error occurred while system routines were handling ATM signaling messages for LAN Emulation.

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

Error Message

%LANE-6-LEC: [chars]

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%LANE-3-LEC_BADAD: [chars] LEC unable to compute ATM address

Explanation The client cannot obtain an ATM address from the given configuration, or auto-assignment failed to get an ATM prefix from the switch.

Recommended Action If you expect the switch to assign the prefix to the router, check that the Interim Local Management Interface (ILMI) is functional and the switch has a prefix configured. Otherwise, confirm that the client has an address in the NVRAM configuration.

Error Message

%LANE-3-LEC_CONTROL_MSG: Received bad control message on interface
> [chars], 10*ONESEC

Explanation The client received a control message over one of its control virtual channel connections (VCCs) that failed the header check.

Recommended Action This message indicates a non-interoperable LANE configuration server, LANE server, or LANE client implementation on the emulated LAN.

Error Message

%LANE-3-LEC_LISTEN: [chars] listen failed on [chars]

Explanation The client failed an attempt to listen on a particular ATM address.

Recommended Action Reconfigure the client ATM address. It is conflicting with another component on the ATM Interface Processor (AIP) for the same ATM address.

Error Message

%LANE-3-LEC_SIGNAL: Unexpected SigAPI event [dec], 10*ONESEC

Explanation ATM signaling sent the client an unexpected message type.

Recommended Action This message should not display. Call your technical support representative for assistance.

Error Message

%LANE-4-LEC_STATE_ERROR: State: [dec], Event [dec]

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%LANE-6-LEC_TIMER: Timer [chars] expired

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%LANE-3-LSV_ADDR: [chars] elan [chars] unable to register LES/BUS
ATM addr

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

```
%LANE-3-LSV_BADAD: <interface> elan <ELAN name> unable to compute  
[chars] ATM address
```

Explanation Software was unable to compute an ATM address based on the ATM address template given. The characters in `chars` (see above display) will be either “BUS” (broadcast-and-unknown), “server”, or “config server” in the actual error message.

Recommended Action Enter a correct ATM address template for the LAN emulation component (“BUS,” “server”, or “config server”) named in the error message.

Error Message

```
%LANE-3-LSV_CRASH, MSG_TRACEBACK, <interface> elan <ELAN name>  
unrecoverable error [chars]
```

Explanation An internal error occurred.

Recommended Action This error should not occur. Download the system error log, then call your technical support representative and provide the log, the error message, and the router configuration.

Error Message

```
%LANE-3-LSV_DUPATM: <interface> elan <ELAN name> client [dec]  
duplicate ATM address registration <ATM address>
```

Explanation An attempt was made by the specified LANE client to register a MAC address and ATM address pair that duplicated an ATM address already registered to another LANE client.

Recommended Action Use the **show lane server** command to list the registered addresses in the LANE server reporting the error. Correct one of the two LANE clients that is trying in error to use the same ATM address.

Error Message

```
%LANE-3-LSV_DUPID: <interface> elan <ELAN name> duplicate LECID  
[dec]
```

Explanation An attempt was made to define two different server-direct PVCs both on the same subinterface (same LANE server) and both for the same client (LECID).

Recommended Action Delete one of the **lane pvc** commands that has this duplicated LECID.

Error Message

```
%LANE-3-LSV_DUPMAC: <interface> elan <ELAN name> client [dec]  
duplicate MAC address registration [enet]
```

Explanation An attempt was made by the specified LANE client to register a MAC address and ATM address pair that duplicated a MAC address already registered to another LANE client.

Recommended Action Use the **show lane server** command to list the registered addresses in the LANE server reporting the error. Correct one of the two LANE clients that is trying in error to use the same MAC address.

Error Message

```
%LANE-4-LSV_LECID: <interface> elan <ELAN name> LECIDs exhausted,  
10*ONESEC
```

Explanation The LANE server specified has 65279 clients. No more can be added.

Recommended Action Change the configurations to avoid trying to have more than 65279 LANE clients on this server.

Error Message

%LANE-3-LSV_MCAST: <interface> elan <ELAN name> unable to create
[chars] MC group

Explanation An internal error occurred.

Recommended Action This error should not occur. Download the system error log, then call your technical support representative and provide the log, the error message, and the router configuration.

Error Message

%LANE-3-LSV_NOREG: <interface> elan <ELAN name> client [dec] unable
to register MAC address [enet]

Explanation An internal error occurred.

Recommended Action This error should not occur. Download the system error log, then call your technical support representative and provide the log, the error message, and the router configuration.

Error Message

%LANE-6-MAKE17: Created vcd [dec] (PVC [dec]/[dec]) for config
server access

Explanation The LANE software created a PVC (normally 0/17) for accessing the LANE configuration server.

Recommended Action Informational message only. No action required.

Error Message

%LANE-3-NAMECHG: Attempt to change ELAN name

Explanation Both the LANE client and the LANE server/BUS may have an emulation LAN (ELAN) name specified in the configuration via the **lane server-bus** and **lane client** commands. If both specify the ELAN name, then the name cannot be changed by re-entering just one of the commands.

Recommended Action Use the **no lane server-bus** command to delete the server-bus or the **no lane client** command to delete the client. Then, the other of the two commands can be re-entered with another ELAN name. Finally, re-enter the deleted command with the new ELAN name.

Error Message

%LANE-3-NEWPREF: <interface> elan <ELAN name> ATM address prefix
[chars]

Explanation Entering a new ATM address template for some LANE component caused the specified LANE server or bus to drop all clients and restart.

Recommended Action Informational message only. No action required.

Error Message

%LANE-3-NOILMI, MSG_TRACEBACK, ILMI service registration failed

Explanation The Interim Local Management Interface (ILMI) feature is not included in the software build running on the router.

Recommended Action Reload router with software that includes the ILMI feature.

Error Message

%LANE-3-NOINT: <interface> still destroying old sub-interface

Explanation An attempt was made to create a new subinterface while a previous version of the subinterface was still being destroyed.

Recommended Action Wait a minute and try again. If failure still occurs, try shutting down the main interface. Rebooting may be required to recover in extreme cases.

Error Message

%LANE-3-NOREGATM: <interface> cannot register <ATM address> with ILMI

Explanation An attempt to register the given ATM address with the ATM switch failed. This failure can occur because the ATM switch is down or misconfigured. The registration will be retried.

Recommended Action If the situation persists after a number of attempts, and the switch is up, the configuration of the switch and router must be examined. The most likely cause is that ATM address being registered is not compatible with the parameters — for example, the ATM address prefix — configured in the switch. Correct the configuration.

Error Message

%LANE-3-NOVCD: VCDs exhausted

Explanation When trying to create PVC 0/17, the router ran out of PVC resources.

Recommended Action The number of PVCs can be increased with the **atm maxvc** command.

Error Message

%LANE-3-PVCBAD: <interface> elan <ELAN name> PVC vcd [dec] has no [chars] assigned

Explanation The characters in *chars* (see above display) will be either “ATM address” or “LECID”. This message is reported when a permanent virtual circuit (PVC) is created without all the necessary information included in the **lane pvc** command.

Recommended Action Include a **lane pvc** command with the information appropriate for the PVC.

Error Message

`%LANE-3-PVCLECS: Unable to create PVC [dec]/[dec]`

Explanation An attempt to create the named PVC failed. The most likely reason is that a PVC was defined on the same or another sub-interface with the same virtual path identifier/virtual channel identifier (VPI/VCI), but with a different encapsulation or usage type.

Recommended Action Correct the configuration.

Error Message

`%LANE-3-REGSTATE, MSG_TRACEBACK, ILMI event in state [dec]`

Explanation An internal error occurred.

Recommended Action This error should not occur. Download the system error log, then call your technical support representative and provide the log, the error message, and the router configuration.

Error Message

`%LANE-3-TYPECHG: Attempt to change ELAN type`

Explanation Both the LANE client and the LANE Server/BUS may have an ELAN type specified in the configuration via the **lane server-bus** and **lane client** commands as either Ethernet or Token-Ring. If both, specify the type; the type cannot be changed by re-entering just one of the commands.

Recommended Action Use the **no lane server-bus** command to delete the server-bus or the **no lane client** command to delete the client. Then, the other of the two commands can be re-entered with a new type. Finally, re-enter the deleted command with the new type.

LANMGR Error Messages

IBM LAN Network Manager error messages

Error Message

%LANMGR-4-BADRNGNUM: Ring number mismatch on [chars], shutting down RPS.

Explanation The router detected a conflict in assigned ring numbers for the specified Token Ring. The Ring Parameter Server (RPS) function was shut down to prevent potentially incorrect information from being sourced onto the ring.

Recommended Action Check all bridges connected to this Token Ring and ensure that they are using the same assigned ring number.

Error Message

%LANMGR-4-BADUPCALL: Unexpected call ([chars]) from LLC2 for Bridge [hex]-[hex]-[hex].

Explanation An internal software error occurred.

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

Error Message

%LANMGR-4-OLDTRAMON: Cannot run RPS on [chars], Old TRAMON code.

Explanation The software on this interface cannot support the functions required for LAN Network Manager.

Recommended Action Call your technical support representative about a firmware upgrade for this interface card.

LAPB Error Messages

X.25 Link Access Protocol, Balanced error messages

Error Message

%LAPB-4-CTRLBAD: Interface [chars], Invalid control field

Explanation A received FRMR reported a frame with an invalid control code.

Recommended Action Check the serial line and the devices attached to the line.

Error Message

%LAPB-4-FRAMEERR: Interface [chars], Frame error: CF
[hex], VS[dec] [char] VR [dec], Reason [hex]

Explanation A FRMR frame was received, indicating that a protocol violation was detected. The Reason field will be interpreted by generating INFOBAD, CTRLBAD, N1TOOBIG, or INVNR messages immediately after this message; refer to the explanations for these messages for more information.

Recommended Action The protocol will recover by resetting the service. This will disrupt any network service on top of LAPB (for example, X.25 virtual circuits will be cleared). Follow the recommended action for any error message following the FRMR reports; if service becomes unacceptable, check the serial line and its attached devices.

Error Message

%LAPB-4-INFOBAD: Interface [chars], Info field not permitted

Explanation A received FRMR frame reported that an information field was present in a frame where no information field is allowed.

Recommended Action Check the serial line and the device attached to the line.

Error Message

%LAPB-4-INVNR: Interface [chars], Invalid NR value

Explanation A received FRMR reported a frame with an invalid N(R) value.

Recommended Action Verify that the equipment attached to the serial line is configured with the same K value (maximum number of outstanding I frames).

Error Message

%LAPB-4-N1TOOBIG: Interface [chars], N1 too large

Explanation A received FRMR reported an information frame that was too long.

Recommended Action Verify that the equipment attached to the serial line is configured with the same N1 value. N1 is in bits and includes the entire frame plus 16 bits of CRC. However, some equipment may require configuration in octets, the omission of the two CRC octets, or the omission of the three octets of LAPB control information.

Error Message

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

Explanation There was insufficient memory for the LAPB protocol engine to send a message.

Recommended Action This message is acceptable if it occurs infrequently, because the LAPB protocol is designed to handle loss of frames. Frequent occurrences can cause disruption of service. The system can be configured to ease memory demands or, if conditions warrant, the system can be upgraded to a larger memory configuration.

Error Message

%LAPB-3-NOINPIDB: Input idb not set

%LAPB-3-NULLPAK: Interface [chars], NULL packet ptr, rvr [dec], vs [dec], vr [dec]

Explanation An internal software error occurred.

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

LAT Error Messages

DEC Local Area Transport error messages

LEX Error Messages

Error Message

%LAT-3-BADDATA: Tty[t-line], Data pointer does not correspond to current packet

%LAT-3-BUFFULL: Tty[t-line], data buffer full with count [dec]

Explanation An internal software error occurred.

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

Error Message

%LAT-3-NOSYNC: Tty[t-line], Output data ptrs out of sync with byte count

Explanation An internal software error occurred.

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

Error Message

%LAT-3-NULLIDB: Null IDB pointer with destination [enet]

%LAT-3-QBSPACED: Queue block at [hex] not found for HI connection

%LAT-3-REUSE: Tty[t-line], Attempt to re-use slot array, empty =[dec], fill = [dec]

Explanation An internal software error occurred.

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

LEX Error Messages

LAN extension error messages

Error Message

%LEX-3-NOTSENT: Serial line down, [chars] : [chars] not sent

Explanation The serial line went down, and the specified command was not sent to the LAN Extender.

Recommended Action Determine why the serial line went down. For example, was the cable was pulled, or the LAN Extender powered off? The command will automatically be re-sent once the serial interface is operational.

Error Message

%LEX-3-RCMDNAK: [chars] : [chars] could not be processed by LAN Extender

Explanation The LAN Extender could not process the command from the host router. Possible causes are:

- The LAN Extender ran out of memory.
- The message from the host router is malformed.
- A request to **write flash** occurred while the LAN Extender was busy writing flash for a previous request.
- The size of a file to be downloaded is greater than the amount of flash memory available.

Recommended Action If the command was **copy tftp lex unit-number** or **copy flash lex unit-number**, make sure that the correct file, that is, a FLEX image file, is specified. Only a single copy request can be handled at one time. If the problem was caused by a temporary out-of-memory condition on the LAN Extender, re-enter the command.

Error Message

%LEX-3-RCMDREJ: [chars] : [chars] could not be processed by LAN Extender

Explanation The LAN Extender did not recognize the code for the specified remote command. This might occur if the user is running old LAN Extender software with newer host router software that has support for new LEX remote commands.

Recommended Action Update the LAN Extender software.

Error Message

`%LEX-3-TIMEOUT: Retry count exceeded for [chars] : [chars]`

Explanation The host router re-sent the given message as many times as specified in the **lex retry-count** command configuration variable, without receiving an acknowledgment from the LAN Extender. At this point, the host router gives up trying to send this particular remote command message.

Recommended Action Use the LEDs on the LAN Extender to determine if it is operational. Confirm that the **lex timeout** configuration command is set appropriately for the speed of the link.

LINEPROTO Error Message

Line Protocol error message

Error Message

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

Explanation The data link level line protocol changed state.

Recommended Action Notification message only. No action required.

LINK Error Messages

Data link error messages

Error Message

`%LINK-3-BADENCAP: Interface [chars] Bad encapsulation code [dec]`

Explanation The lower level software was unable to write a MAC header for a datagram. A probable cause is configuration error.

Recommended Action Call your technical support representative for assistance.

Error Message

%LINK-3-BADEETHER: Interface [chars], Bad ethernet
encap code

Explanation An internal software error occurred.

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

Error Message

%LINK-3-BADMACREG: Interface [chars], non-existent MACADDR registry
for link [dec]

Explanation An attempt to map a network level address to a MAC level address failed.

Recommended Action Call your technical support representative for assistance.

Error Message

%LINK-2-BADVCALL: Interface [chars], undefined entry point

Explanation An internal software error occurred. The high-level system code tried to use an unimplemented entry point with the virtual IDB driver.

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

Error Message

%LINK-5-BOOTP: [chars] address [inet], resolved by [inet]

Explanation An interface's IP address was successfully learned dynamically through BootP. The first address is the learned IP address. The second IP address is the IP address of the BootP server that provided the information.

Recommended Action No action required.

Error Message

`%LINK-4-BRIDGECONFLICT: [char], encapsulated BPDU recvd from [enet]`

Explanation An FCIT running in nonencapsulating transparent mode detected an FDDI bridge running in encapsulation mode on the same fiber. This is an unstable situation and should be corrected. The incoming interface is displayed, along with the FDDI MAC address in canonical form.

Recommended Action Upgrade the errant interface to full transparent mode. Call your technical support representative for assistance.

Error Message

`%LINK-5-CHANGED: Interface [chars], changed state to [chars]`

Explanation The interface hardware changed state.

Recommended Action Notification message only. No action required.

Error Message

`%LINK-3-COMPREG: Interface [chars], non-existent (de)compression registry. Packet dropped`

Explanation A software or hardware error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

`%LINK-4-FDDISTAT: Interface [chars], FDDI state [chars] detected`

Explanation There was a state change on the FDDI ring.

Recommended Action Dependent on the specific error condition. Call your technical support representative for assistance.

Error Message

%LINK-4-FDDIUNK: [chars]: unknown [hex] len [dec]

Explanation An unknown FDDI datagram was received.

Recommended Action Record the complete error message and call your technical support representative for assistance.

Error Message

%LINK-2-LINEST: No linestate vector for [chars]

Explanation An internal software inconsistency occurred.

Recommended Action Call your technical support representative for assistance.

%LINK-4-NOMAC: A random default MAC address of [enet] has\n been chosen.

Explanation An addressing inconsistency occurred.

Recommended Action Make sure that this address is unique, or specify MAC addresses for commands such as **novell routing** that allow the use of this address as a default.

Error Message

%LINK-2-NOSOURCE: Source idb not set

%LINK-3-TOOBIG: Interface [chars], Output packet size of [dec] bytes too big

%LINK-3-TOOSMALL, MSG_TRACEBACK, Interface [chars], Output packet size of [dec] bytes too small. Changed to [dec] bytes

%LINK-2-UENCAP: Unknown line encapsulation code [dec]

Explanation An internal software error occurred.

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

LINK Error Messages

Error Message

%LINK-5-RARP: [chars] address [inet], resolved by [inet]

Explanation The Reverse Address Resolution Protocol (RARP) resolved an IP address.

Recommended Action Notification message only. No action required.

Error Message

%LINK-3-REMLOOP: Interface [chars], remote loop [chars] [chars]

Explanation The interface entered or exited a remote loopback.

Recommended Action Notification message only. No action is required.

Error Message

%LINK-5-SLARP: [chars] address [inet], resolved by [inet]

Explanation The Serial Line Address Resolution Protocol (SLARP) resolved an IP address.

Recommended Action Notification message only. No action required.

Error Message

%LINK-3-UPDOWN: Interface [chars], changed state to [chars]

Explanation The interface hardware went either up or down.

Recommended Action If the state change was unexpected, confirm the configuration settings for the interface.

LLC2 Error Messages

Logical Link Control, type 2 error messages

Error Message

%LLC-2-UNEXPECT, MSG_TRACEBACK, LLC2: [chars] UNEXPECTED EVENT

Explanation An internal software error was found. A software component is trying to use LLC2 structures that do not exist.

Recommended Action Record the configuration and any information that would be useful in recreating the error and call your technical support representative.

Error Message

%LLC-4-T1_ERR: LLC2: [chars] INCREASE LLC TIMERS

Explanation The T1 timer popped for an LLC2 session. However, the frame which is to be retransmitted is still on a queue inside the router awaiting transmission over RSRB, Frame Relay, or other protocol. If the retransmission occurs, the LLC2 session will probably fail due to N2 retry failures.

Recommended Action Increasing the LLC2 acknowledgment timers decreases the likelihood of failure. In addition, investigate sporadic congestion in a routed network.

LNMC Error Messages

Error Message

%LNMC-3-BADCLSI, MSG_TRACEBACK, [chars] primitive not valid for lnm
[hex] [hex]

%LNMC-3-BADCLSICNF, MSG_TRACEBACK, [chars] Invalid confirm [chars]
[cha [chars]

%LNMC-3-BADCLSIDATALEN, MSG_TRACEBACK, [chars] Bad data len =[dec]
[hex]

%LNMC-3-BADCLSIHDRLEN, MSG_TRACEBACK, [chars] Bad header len = [hex]
[hex] [chars]

%LNMC-3-BADCLSIIDTYPE, MSG_TRACEBACK, [chars] Invalid ID type =
[hex] [hex] [chars]

%LNMC-3-BADCLSIIND, MSG_TRACEBACK, [chars] Invalid indication
[chars], [chars]

%LNMC-3-BADCLSIPRIMTYPE, MSG_TRACEBACK, [chars] Invalid primitive
type = [hex] [hex] [chars]

%LNMC-3-BADCLSIRET, MSG_TRACEBACK, [chars] Invalid ret code [hex]
[hex] [chars] [chars]

%LNMC-3-BADCLISISAP, MSG_TRACEBACK, [chars] Bad clsi SAP id = [hex]
[chars]

Explanation A LAN network manager system error occurred.

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

LPD Error Message

Line printer daemon error message

Error Message

`%LPD-3-MANYLF: Line [t-line], packet has too many newlines to convert`

Explanation An internal buffer did not have enough room to add all the necessary carriage returns to a packet of LPD data destined for a printer configured with a **newline-convert** command. This message is unlikely to occur with a file containing valid data.

Recommended Action Check the file being printed to see whether it contains valid, printable data.

M32 Error Messages

HDLC controller error messages

Error Message

`%M32-1-NOMEMORY, 0, msgtxt_nomemory, MSGDEF_LIMIT_SLOW`

Explanation An error has occurred caused by a lack of main memory, a lack of I/O memory, or a hardware failure.

Recommended Action Use the **show memory** command to confirm that there is enough memory available. If there is not enough memory, you need to upgrade your router. If the router has enough memory, then there is probably a hardware problem. Call your technical support representative for assistance.

MAILBOX Error Messages

ChipCom mailbox error messages

Note All MAILBOX-class messages are generated in response to various conditions arising from the use of a mailbox implemented on a partner port of the Cisco 2500. It is used to pass administrative information between the router and the main management module of the partner's platform.

Error Message

%MAILBOX-3-BADCHKSUM: Checksum failed. Expected = 0x%02x, calculated = 0x%02x. Ignoring PDU.

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%MAILBOX-3-BADDATA: Bad data in mailbox test, got [hex], expected [hex]

%MAILBOX-3-FLAGSTAT: Timeout while waiting for FLAGSTAT, status=[hex]

%MAILBOX-3-INITPC2: Timeout waiting for PC2 during initialization, status=[hex]

%MAILBOX-3-INTERR: Bad mailbox interrupt = [hex]

%MAILBOX-3-MAIL020: Timeout while waiting for MAIL020, status=[hex]

%MAILBOX-3-MAILFAIL: Mailbox failed to initialize

%MAILBOX-3-PC2: Timeout while waiting for PC2, status=[hex]

%MAILBOX-3-SPURINT: Spurious mailbox interrupt = [hex], MAIL020 not asserted

Explanation A hardware problem was detected in a ChipCom interface board.

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

Error Message

%MAILBOX-3-BADECHO: Echo-response did not match echo-request!

Explanation The data received from an ECHO_RESPONSE protocol data unit (PDU) did not match the original data provided in the ECHO_REQUEST. Usually, this message is seen during initialization, and indicates a catastrophic failure of the mailbox interface. See MAILBOX-3-INITFAIL for more information.

Recommended Action Confirm the router module installation. Make sure the software revision on the management module and the router module carrier card is up-to-date. If the error persists, call your technical support representative for assistance.

Error Message

`%MAILBOX-3-BADPDU: PDU of type [chars] received. Invalid or unsupported. Ignoring.`

Explanation The protocol data unit (PDU) received was valid, but the type is not supported in the current software implementation. It will be ignored.

Recommended Action Informational message only. No action required.

Error Message

`%MAILBOX-3-INITFAIL: Mailbox initialization failure.
[Incoming|Outgoing] mailbox offline.`

Explanation A catastrophic failure involving the initialization of the administrative mailbox occurred. The mailbox will be taken offline and remain in that state until a router module reset, or a system reload, occurs. At that time, initialization will again be attempted. Note that the functionality of the router, that is, its ability to receive and forward packets, is not affected by this error.

Recommended Action Confirm the router module installation. Make sure the software revision on the management module and the router module carrier card is up-to-date. If the error persists, call your technical support representative for assistance.

Error Message

`%MAILBOX-6-INITOK: Mailbox initialization successful.`

Explanation This message is generated after a router reload to indicate the mailbox was successfully initialized.

Recommended Action Informational message only. No action required.

Error Message

`%MAILBOX-7-MBOXDEBUG: [chars]`

Explanation This message header is paired with general debugging messages used to provide information about the functionality of the mailbox. To enable mailbox debugging, issue the command **debug mailbox**.

Recommended Action Advisory message only. No action required.

Error Message

`%MAILBOX-3-NOECHO: Echo-request timed out. No response received.
Mailbox offline.`

Explanation An ECHO_RESPONSE was not received in the appropriate time after the generation of an ECHO_REQUEST. This failure only occurs during mailbox initialization, and indicates a problem between the communication path of the router module and its carrier card.

Recommended Action Confirm the router module installation. Make sure the software revision on the management module and the router module carrier card is up-to-date. If the error persists, call your technical support representative for assistance.

Error Message

`%MAILBOX-3-OFFLINE: [Incoming|Outgoing] mailbox is offline.
Interrupt ignored.`

Explanation This message is generated when an attempt is made by the management module to communicate with an offline mailbox. When it appears, it indicates a problem exists between the perceived state of the mailbox from the router's side versus the management module's side.

Recommended Action Issue a system-wide reset on the management module. If the error persists, call your technical support representative for assistance.

Error Message

`%MAILBOX-7-ONLINE: [Incoming|Outgoing] mailbox coming online.`

Explanation This message is generated only when mailbox debugging is enabled. It provides information about the state of each incoming or outgoing mailbox.

Recommended Action Advisory message only. No action required.

Error Message

%MAILBOX-7-READ: Reading 0x%02x from carrier.

Explanation This message is generated only when mailbox debugging is enabled. It provides very low-level information about the incoming mailbox data stream.

Recommended Action Advisory message only. No action required.

Error Message

%MAILBOX-3-TIMEOUT: Intra-PDU timeout occurred on [incoming|outgoing] mailbox data.

Explanation A timeout occurred while sending or receiving the characters of a protocol data unit (PDU). The entire PDU will be ignored.

Recommended Action Informational message only. No action required

Error Message

%MAILBOX-7-WRITE: Writing 0x%02x to carrier.

Explanation This message is generated only when mailbox debugging is enabled. It provides very low-level information about the outgoing mailbox data stream.

Recommended Action Advisory message only. No action required.

MCI Error Messages

Multiport Communications Interface error messages

Error Message

`%MCI-5-INPUTERR: Interface [chars] excessive input
error rate`

Explanation The input error rate was so high that the interface was temporarily disabled. The interface will be automatically reenabled in 30 seconds.

Recommended Action If this message recurs, check the communication lines.

Error Message

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

Explanation The configuration PAL is missing.

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

Error Message

`%MCI-4-NOKEEPALIVE: Interface [chars] keepalive not sent`

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

`%MCI-5-OBSOLETE: Obsolete MCI firmware: can't route
[chars] and bridge simultaneously`

Explanation The firmware on your MCI controller card is out of date.

Recommended Action Upgrade your MCI firmware.

Error Message

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

Explanation A hardware device did not respond appropriately to a request. This generally indicates a hardware problem.

Recommended Action Call your technical support representative for assistance.

Error Message

`%MCI-3-RXINDEX: Unit [dec], invalid RX index [dec]`

Explanation The MCI did not answer a Multibus request. This generally indicates a hardware problem.

Recommended Action Call your technical support representative for assistance.

Error Message

`%MCI-3-SETUPERR: Unit [dec], Error ([hex]) on setup, index [hex], restarting controller - mci_interrupt()`

Explanation A hardware device did not respond appropriately to a request. This generally indicates a hardware problem.

Recommended Action Call your technical support representative for assistance.

Error Message

`%MCI-4-TESTFAIL: Unit [dec] failed [chars] test, skipping`

Explanation A hardware component failed an internal diagnostic test.

Recommended Action Call your technical support representative for assistance. You need to replace the malfunctioning component.

MK5 Error Messages

MK5025 serial controller error messages

Error Message

%MK5-3-BADENCAP: Unit [dec], bad encapsulation
in idb->enctype = [hex]

%MK5-3-BADRING: Bad [chars] ring size

%MK5-3-BADUNIT: Bad unit number [dec]

Explanation An internal software error occurred.

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

Error Message

%MK5-0-INITFAIL: Unit [dec], initialization timeout
failure,csr[dec]=[hex]

%MK5-1-INITNOPPRIM: Unit [dec], initialization
failure - No CSR1_PPRIM_INIT_CONF, csr1 = [hex]

%MK5-1-INITUERR: Unit [dec], initialization CSR1_UERR
failure,csr1=[hex]

Explanation The hardware failed to initialize correctly.

Recommended Action Repair or replace the controller.

Error Message

%MK5-5-LINEFLAP: Unit [dec] excessive modem control changes

Explanation Too many modem control interrupts have been received. The port was disabled to prevent excessive use of the CPU.

Recommended Action Check the cable on the serial port.

Error Message

%MK5-1-MEMERR: Unit [dec], memory error, csr0 = [hex]

Explanation A network serial interface detected a hardware problem.

Recommended Action Repair or replace the controller.

Error Message

%MK5-0-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

%MK5-3-ODDSTART: Interface [chars], Odd datagram
start = [hex], pak =[hex]

%MK5-3-OUTENCAP: Unit [dec], bad output packet encapsulation: [hex]

Explanation An internal software error occurred.

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

Error Message

%MK5-3-OWNERR: Unit [dec], buffer ownership error

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

Recommended Action Repair or replace the controller.

Error Message

%MK5-3-PL0STERR: Unit [dec], provider primitive lost, csr0=[hex], csr1=[hex]

%MK5-3-PPRIMERR: Unit [dec], unexpected provider primitive, csr0=[hex], csr1=[hex]

%MK5-3-SPURPPRIMERR: Unit [dec], spurious provider primitive, csr0=[hex], csr1=[hex]

%MK5-3-UPRIMERR: Unit [dec], user primitive error, csr0=[hex], csr1=[hex]

Explanation A network serial interface detected a hardware problem.

Recommended Action Repair or replace the controller.

NETMGT Error Message

Network Management error message

Error Message

%NETMGT-6-ALERT: [chars] SNA LLC : [chars]\n [chars]\n [chars]\n [chars]

Explanation A software or hardware error occurred.

Recommended Action Call your technical support representative for assistance.

NHRP Error Message

Next Hop Resolution Protocol error message

Error Message

```
%NHRP-3-NOBUFFER: No buffer available for sending packet,  
MSGDEF_LIMIT_MEDIUM
```

Explanation The NHRP software could not 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.

NIM Error Messages

Network interface module error messages

Error Message

```
%NIM-2-BADSLLOT: Illegal reference to non-existent slot [dec]
```

```
%NIM-2-BADSUBUNIT: Illegal reference to non-existent subunit [dec]  
in slot [dec]
```

```
%NIM-2-DEADICHAINQ: Attempted to manipulate uninitialized ichainQ in  
[chars]
```

```
%NIM-2-LOSTICHAINQ: Couldn't find idb [hex] in ichainQ in [chars]
```

```
%NIM-2-NOHWADDRESS: All hardware addresses have been allocated -  
maximum of [dec]
```

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

```
%NIM-2-BADNIMREV: Unsupported version of [chars] NIM in slot [dec] |>  
Version 0x[hex]
```

Explanation The indicated network interface module (NIM) is not supported because it is not of the correct revision. Certain platforms (Cisco 4500 or Cisco 4700, for example) require some NIMs to be of a minimum rev level.

Recommended Action Upgrade the NIM to the proper level.

Error Message

```
%NIM-2-UNSUPNIM: Unsupported [chars] NIM in slot [dec]
```

Explanation The indicated NIM is not supported on this platform.

Recommended Action Remove the NIM.

OIR Error Messages

Online insertion and removal error messages

Error Message

```
%OIR-6-INSCARD: Card inserted in slot [dec], interfaces  
administratively shut down
```

Explanation The OIR facility detected a newly inserted processor in slot `dec`. The inserted interface will be shut down until it is configured by the user or, if an interface of that type was previously configured, it will be restored to its previous state.

Recommended Action Informational message only. No action required.

Error Message

`%OIR-3-LONGSTALL: Long bus stall ([dec] ms), check for improperly seated cards`

Explanation Something is preventing the CxBus or CyBus from operating. The usual reason is an improperly seated interface processor.

Recommended Action Make sure all interface processor cards are firmly seated. If the problem persists, it may be a hardware problem. Call your technical support representative for assistance.

Error Message

`OIR-6-NOEOIR: [chars] hardware version 1.0 not capable of EOIR`

Explanation An attempt was made to remove or insert a card in a system containing at least one card that does not support enhanced online insertion and removal (EOIR).

Recommended Action Upgrade to a card that supports EOIR features. If this does not solve the problem, contact your technical support representative for assistance.

Error Message

`%OIR-6-REMCARD: Card removed from slot [dec], interfaces disabled`

Explanation The OIR facility detected the removal of a processor from slot [n]. The interfaces on that processor will be administratively shut down and marked as removed. The routing table will be flushed of any routes through the removed interfaces.

Recommended Action Informational message only. No action required.

OSPF Error Messages

Open Shortest Path First error messages

Error Message

%OSPF-4-BADLENGTH: Invalid length [dec] in OSPF packet from [inet] (ID [inet]), [chars]

Explanation The system received an OSPF packet with a length field of less than normal header size or inconsistent with the size of the IP packet in which it arrived. This indicates an error in the sender of the packet.

Recommended Action Call your technical support representative for assistance.

Error Message

%OSPF-4-BADLSATYPE: LOG_WARNING, MSG_PROCESS | MSG_TRACEBACK Invalid lsa type [dec] in LSA [dec], [dec] from [dec], OSPF_COMPLAIN-IVL

Explanation The router received an LSA with invalid LSA Type. The cause is either memory corruption or unexpected behavior on a router.

Recommended Action From neighbor address, locate the problem router and reboot it. To determine what is causing this problem, call your technical support representative for assistance.

Error Message

%OSPF-4-CONFLICTING_LS Aid: Found lsa type [dec] in LSA [inet], [inet] from [inet], [chars]

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%OSPF-4-ERRRCV: Received invalid packet: [chars] from [inet], [chars]

Explanation An invalid OSPF packet was received. Details are included in the error message. The cause might be a misconfigured OSPF or an internal error in the sender.

Recommended Action Check the OSPF configuration of the receiver and the sender for inconsistency.

Error Message

`%OSPF-3-INTERNALERR: Internal error: [chars], OSPF_COMPLAIN_IVL`

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

`%OSPF-3-NOBACKBONE: Flagged as being an ABR without a backbone`

Explanation The router was flagged as an Area Border Router (ABR) without backbone area in the router.

Recommended Action Restart the OSPF process.

Error Message

`%OSPF-3-NOCONNDB: No database entry for connected address [int]`

Explanation While calculating OSPF routes, the router could not find the link-state advertisement that represents the connected route in the router.

Recommended Action Clear the IP routes in the routing table by entering the command `clear ip ro`.

Error Message

`%OSPF-3-NOLSA: Failed to find this router LSA in [chars]`

Explanation The router is not able to find its own router link-state advertisement. This can occur occasionally and self-correct. However, if this message recurs, restart the OSPF process.

Recommended Action Call your technical support representative for assistance.

Error Message

%OSPF-3-NOMEMORY: 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

%OSPF-4-NONEIGHBOR: Received [chars] from unknown neighbor [inet]

Explanation OSPF hello, database description, or database request packet was received, but the router could not identify the sender.

Recommended Action This situation should correct itself. If the message recurs, call your technical support representative for assistance.

Error Message

%OSPF-4-NORTRID: Could not allocate router ID

Explanation OSPF failed while attempting to allocate a router ID from the IP address of one of its interfaces.

Recommended Action Make sure that there is at least one interface that is up and has a valid IP address. If there are multiple OSPF processes running on the router, each process needs its own unique router ID. You must have enough “up” interfaces so that each of them can obtain a router ID.

Error Message

%OSPF-6-NOSRCPDB: ex_route_callback(): Can't find the src protocol to redistribute net [inet] [inet]

Explanation OSPF attempted to redistribute a route but could not find a valid source protocol.

Recommended Action No action is required.

Error Message

```
%OSPF-6-NOTREDIST1: ex_route_callback(): do not redistribute net  
[inet] [inet], [chars]
```

Explanation For information only.

Recommended Action No action is required.

Error Message

```
%OSPF-6-NOTREDIST3: build_ex_route(): don't redistribute net [inet]  
[inet], [inet] advertises it already
```

Explanation For information only.

Recommended Action No action is required.

Error Message

```
%OSPF-4-NOTREDIST4: Database scanner: external LSA [inet] [inet] is  
lost, reinstalls
```

Explanation The software detected an unexpected condition. The router will take corrective action and continue.

Recommended Action Record the entire error message and note any OSPF problem you experience. Report the error message to your technical support representative.

Error Message

```
%OSPF-4-NOTREDIST5: db_free: external LSA [inet] [inet],
```

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%OSPF-4-OSPFINTDOWN: Interface [chars] is up but OSPF state is down.
Clean up, OSPF_COMPLAIN_IVL

Explanation An inconsistency in an internal state was found and corrected.

Recommended Action Informational message only. No action required.

Error Message

%OSPF-3-UNKNOWNSTATE: Reached unknown state in neighbor state
machine

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%OSPF-4-VIRTUAL_IN_NON_BACKBONE: Virtual link information found in
non-backbone area: [chars], OSPF_COMPLAIN_IVL

Explanation An internal error occurred.

Recommended Action Call your technical support representative for assistance.

PA Error Messages

Error Message

%PA-1-BADPABAY: msg_badbay

Explanation The software specified an out of range Port Adaptor Bay.

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

PAD Error Messages

Error Message

`%PA-2-BADIDB: PA interface idb incorrect, [hex]`

Explanation The Pascb data structure indicates a zero IDB.

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

Error Message

`%PA-2-BADINTERFACE: msg_badsubunit`

Explanation The software specified an out-of-range port adapter interface.

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

Error Message

`%PA-2-BADPASCB: PA interface pascb incorrect, [hex]`

Explanation The Pascb data structure was incorrectly set in the command data structure.

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

PAD Error Messages

X25 packet assembler/disassembler (PAD) error messages

Error Message

%PAD-3-GETLINE: Tty[t-line], bad return code [dec]
fromx3_getline()

%PAD-2-INTR: [chars] called at interrupt level [hex]

%PAD-2-PUTSETUP: Tty[t-line], buffer already setup

Explanation An internal software error occurred.

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

PARSER Error Messages

Parser error messages

Error Message

%PARSER-4-ADRANGE: Bad range <[dec]-[dec]> for command '[chars]'

Explanation A software or hardware error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%PARSER-4-BADCFG: Unexpected end of configuration file.

Explanation This message occurs when a configuration is read from the tftp server or NVRAM and the end-of-file is encountered before the “end” statement. The configuration may be corrupted or incomplete. What was read is in effect.

Recommended Action Make sure the configuration is good and execute a **write memory** command to write the good configuration to NVRAM, or **write network** command to write to network TFTP server.

Error Message

%PARSER-3-BADSUBCMD: Unrecognized subcommand in
Function: [chars]
Command: `[chars]`
Switch value: [dec]

%PARSER-3-CREATEINT: Can't create any more subinterfaces

%PARSER-4-INVLDLINE: Invalid line in NV generation: [chars]

%PARSER-4-LINKPOINT: Parser reached link_point

%PARSER-4-MULFUNCS: Unknown test in test_multiple_funcs [char]

%PARSER-4-MULTIPLEIFS: interface_action: multiple ifs present when
unit_only set

%PARSER-3-NOLINK: no link_point [dec] in the [chars] [chars] command
chain

%PARSER-4-NUMHELP: general_number_short_help: Invalid [chars]
number flag

%PARSER-4-NVGEN: nvgen_token called but csb->nvgen not set

%PARSER-4-PROTOADDR: protoaddr_action: Unknown link_type [dec]

Explanation The parser failed an internal software check.

Recommended Action Call your technical support representative for assistance.

Error Message

%PARSER-2-INTDISABLE: Interrupts disabled in mode [chars] by command
'[chars]'

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

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

Explanation A memory allocation failed, possibly because the router is out of memory, or because the parser is using more memory than it should.

Recommended Action If the router is running out of memory, reduce other system activity to ease memory demands. If the router has sufficient memory but the parser is low on memory, call your technical support representative for assistance.

PCBUS Error Messages

PCbus (PC ISA-to-AccessPro router interface) error messages

Error Message

`%PCBUS-3-BADENCAP, 0, msgtxt_badencap`

Explanation A non-HDLC encapsulation packet was received. The packet will be treated as an HDLC packet and subsequently be dumped.

Recommended Action An informational message only. No action required.

Error Message

`%PCBUS-1-NOMEMORY, 0, msgtxt_nomemory, MSGDEF_LIMIT_SLOW`

Explanation This message is logged (via the global **logging** command) when an attempt to get packet memory or data memory fails. The router will crash right after the error is logged.

Recommended Action An informational message only. No action required.

PPP Error Messages

Point-to-Point Protocol error messages

Error Message

```
%PPP-4-CONFNAK: fsm_rconfnak([hex]) - possible  
CONFNAK loop
```

Explanation The remote and local PPP cannot agree on a set of options that both can perform.

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

Error Message

```
%PPP-4-IPXNET: mismatched IPX network numbers. Ours = [hex], theirs  
= [hex]
```

Explanation The two ends of a serial link have different IPX network numbers.

Recommended Action Confirm the configuration of both devices.

Error Message

```
%PPP-6-LOOPED: The line appears to be looped back
```

Explanation The communications line appears to be echoing the characters that are sent to it.

Recommended Action Check your data communications equipment to make sure it is configured correctly.

QA Error Message

Error Message

%PPP-4-NOEXTTACACS: PPP TACACS is configured but extended TACACS is not.

Explanation PPP was configured to use TACACS, but extended TACACS was not configured or was disabled.

Recommended Action Either issue the **no ppp use-tacacs** command to stop PPP from using TACACS, or issue the **tacacs-server extended** command to enable extended TACACS.

QA Error Message

QA error message

Error Message

%QA-3-ALLOC: [chars]

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

QEM Error Message

QEM error message

Error Message

%QEM-3-DISCOVER: Found [chars] switch processors

Explanation A hardware or software error occurred.

Recommended Action Call your technical support representative for assistance.

QLLC Error Messages

Qualified Logical Link Control error messages

Error Message

%QLLC-3-BADOPCODE: Opcode [chars] is invalid

Explanation Either remote source-route bridging or local acknowledgment is configured incorrectly.

Recommended Action Verify that remote source-route bridging and local acknowledgment are configured correctly.

Error Message

%QLLC-3-BADQLLCSTATE: Bad QLLC state - [chars]

Explanation An invalid QLLC primitive was detected.

Recommended Action Verify that the partner QLLC device is configured correctly.

Error Message

%QLLC-3-BADRSRBOPCODE: Bad opcode [hex] from [enet] to [enet]

Explanation Either remote source-route bridging is incorrectly configured, or the other RSRB device is down.

Recommended Action Verify that remote source-route bridging is configured correctly with the right version of the IOS software.

Error Message

%QLLC-3-BADSTATE: Bad QLLC state - [chars] - [enet]

Explanation An invalid LLC primitive was detected.

Recommended Action Verify that the Token Ring ports and any participating LAN devices are configured correctly.

Error Message

%QLLC-3-BADSTATEEVENT: Bad QLLC state - [chars] event - [chars]
macaddr - [enet]

Explanation The LLC primitive specified placed the router in an invalid state.

Recommended Action Verify that the Token Ring ports and any participating LAN devices are configured correctly.

Error Message

%QLLC-3-BAD_SUBADDRESS: [chars] is not a subaddress of [chars]

Explanation A remote X.25 device is calling the router for QLLC service using an X.121 address that is not a proper subaddress of the router's X.121 address.

Recommended Action Enable subaddressing on the router, and make sure that the remote X.25 device uses the correct subaddress for the QLLC service it will use.

Error Message

%QLLC-3-DIFFPRTR: [enet] - Different partner - originally [enet] -
now [enet]

Explanation The partner for this QLLC virtual MAC address does not match the MAC address that was defined with the **qlc partner** command.

Recommended Action Verify that the **qlc partner** statement in the configuration file is correct.

Error Message

%QLLC-3-GENERRMSG: [chars]

Explanation The text string provided with this error message describes the specific QLLC problem.

Recommended Action Follow the instructions that appear with the error message. Call your technical support representative for assistance.

Error Message

%QLLC-3-IFRAME: [chars]

Explanation An I-Frame was discarded due to network congestion.

Recommended Action Verify that the LAN is not beaconing and that it is not in a congested state. Call your technical support representative for assistance.

Error Message

%QLLC-3-INCALL_CFG: Incoming call: No QLLC Service Access Point Configured for x.25 subaddress [chars]

Explanation A remote X.25 device is calling the router for QLLC service using a subaddress that was not configured by the X.25 routing facility. The subaddress was not configured for QLLC service.

Recommended Action Correct the QLLC configuration. Configure only the subaddress on the QLLC service, not the complete X.121 address that the remote X.25 device uses.

Error Message

%QLLC-3-LNXNOTFOUND: lnx_remove_macaddr_hash did not find target lnx

Explanation The **qlc srb** command was not defined for this interface.

Recommended Action Add a valid **qlc srb** statement for this serial interface.

Error Message

%QLLC-3-NOLLC2: Unable to open an llc2 session

Explanation An LLC2 session could not be established with the destination MAC address.

Recommended Action Verify that the **qlc partner** statement in the configuration file is correct, and that the partner is on the desired LAN.

Error Message

%QLLC-3-NOMACADDR: No lnx entry for macaddr [enet]

Explanation No virtual MAC address was defined for this interface.

Recommended Action Define the virtual MAC address, using either the **x25 map qllc** or the **x25 pvc qllc** command.

Error Message

%QLLC-3-NOMEM: Not enough memory available

Explanation There is not enough memory in the system to complete this request.

Recommended Action Add more memory to the router. Otherwise, reduce the configuration or the load on the router.

Error Message

%QLLC-3-NONULLXID: Couldn't make null xid - [enet] -[enet]

Explanation An attempt to create an IEEE XID failed.

Recommended Action Verify that the **qllc partner** statement in the configuration file is correct, and that the partner is on the desired LAN.

Error Message

%QLLC-3-NOPAKENQ: Pak enqueue failed

Explanation A packet was not sent to the LAN.

Recommended Action Verify that the LAN partner is configured correctly, and that the partner is on the desired LAN.

Error Message

%QLLC-4-NOQLLC: Unable to open qllc session; current statue is [chars]

Explanation A QLLC session could not be established.

Recommended Action Verify that the **qllc partner** and the **qllc xid** commands are correct.

Error Message

%QLLC-3-NO_QLLCBUFFER: M bit Reassembly failed - couldn't allocate a packet

Explanation The router ran out of memory to allocate buffers.

Recommended Action Make sure that the router configuration is adequate for the service expected of it. You may want to tune the buffer pools, or upgrade to a larger router. At the very least you will need more memory.

Error Message

%QLLC-3-NO_QSR: No QLLC Service Access Points defined, (10 * ONESEC)

Explanation No QLLC services have been configured, even though the router will accept incoming calls for QLLC.

Recommended Action Configure the QLLC service required.

Error Message

%QLLC-3-NO_RESOURCE: Incoming Call: Insufficient resources available, (10 * ONESEC)

Explanation This message is reporting insufficient system memory.

Recommended Action Upgrade the memory.

Error Message

%QLLC-3-NOXID2: Couldn't make xid - [enet] -[enet]

Explanation The QLLC XID could not be forwarded to the LAN.

Recommended Action Verify that the **qlc partner** and the **qlc xid** commands are correct.

Error Message

%QLLC-3-NULLPTR: [chars] ptr is null

Explanation The specified structure was not configured.

Recommended Action Confirm the configuration commands for the structure.

Error Message

%QLLC-3-QLLCMAP_ERR: Incoming call: QLLC map entry not found, (10 *
> ONESEC)

Explanation A software error in the router code occurred.

Recommended Action Call your technical support representative for assistance.

QUICC Error Messages

MC68360 Quad Integrated Communications Controller error messages

Error Message

%QUICC-5-COLL: Unit [dec], excessive collisions. Retry limit [dec]
exceeded

Explanation An Ethernet cable is broken or unterminated.

Recommended Action Check cables for proper connections, termination, etc.

Error Message

%QUICC-5-HBEAT: Unit [dec], heartbeat check failure

Explanation The Ethernet transceiver is malfunctioning.

Recommended Action Replace the hardware.

Error Message

%QUICC-5-LATECOLL: Unit [dec], late collision error

Explanation The Ethernet cable might be too long, or there could be too many repeaters such that the delay from one end to the other is too long. The Ethernet cable might be overloaded with too many users.

Recommended Action Verify that your Ethernet cable is the correct length and that you do not have too many repeaters in use. If these are not the problem, try removing hosts from the Ethernet segment to reduce the load.

Error Message

%QUICC-5-LOSTCARR: Unit [dec], lost carrier. Transceiver problem?

Explanation The Ethernet 10BaseT cable is unplugged.

Recommended Action Connect the 10BaseT Ethernet cable.

Error Message

%QUICC-1-NOMEMORY, 0, msgtxt_nomemory

Explanation The 68360/QUICC CPU was not able to get the memory it needs to carry out its functions. These are possible causes:

- The network is large, requiring a lot of memory for routing tables, etc.
- The router configuration has many features enabled, each of which require a certain amount of memory.
- A software error (memory leak) exists.

Recommended Action Reduce system activity to ease memory demands or upgrade to a larger memory configuration.

Error Message

`%QUICC-3-OWNERR, MSG_TRACEBACK | MSG_PROCESS, msgtxt_ownerror`

Explanation An internal software error occurred.

Recommended Action Call your technical support representative to obtain a software upgrade.

Error Message

`%QUICC-3-UNDERFLO: Unit [dec], underflow error`

Explanation The Ethernet hardware is requesting data faster than the system can supply it. This should never happen unless a serious malfunction occurs.

Recommended Action Call your technical support representative for assistance.

RADIX Error Messages

Radix error messages

Error Message

`%RADIX-3-BADTREE, MSG_TRACEBACK+MSG_PROCESS, Invalid pointer to head of tree, 0x[hex], ONESEC`

Explanation A software programming error occurred.

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

Error Message

`%RADIX-3-DELETE, MSG_TRACEBACK+MSG_PROCESS, Error deleting trie entry, [chars], ONESEC`

Explanation A software programming error occurred.

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

Error Message

%RADIX-2-INIT, MSG_TRACEBACK+MSG_PROCESS, No memory for radix initialization: [chars]

Explanation The system ran out of memory during initialization. This should only occur if an image is too large for the existing dynamic memory.

Recommended Action Use a smaller subset image or upgrade hardware.

Error Message

%RADIX-2-NOMAXKEYLEN, MSG_TRACEBACK+MSG_PROCESS, Programmer error - maximum radix key length not set

Explanation A software programming error occurred.

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

Error Message

%RADIX-3-NOMEMORY, MSG_TRACEBACK+MSG_PROCESS, No memory available [chars], MSGDEF_LIMIT_SLOW

Explanation The system is out of memory.

Recommended Action Try one of these actions to correct the problem:

- Reduce the number of routes accepted by this router.
- Upgrade hardware.
- Use a smaller subset image on run-from-RAM platforms.

Error Message

%RADIX-4-ORPHAN, MSG_TRACEBACK+MSG_PROCESS, Orphaned mask [hex], refcount=[dec] at [hex], next=[hex], 5*ONESEC

Explanation A software error occurred.

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

RCMD Error Messages

Remote command error messages

Error Message

`%RCMD-4-INVALIDHOST: Invalid host address`

Explanation The IP address of the incoming connection was not valid.

Recommended Action Add an entry to the rhost database or determine which client ip address is valid by examining the rhost database.

Error Message

`%RCMD-4-NOMEMORY: No memory available for Rcmd`

Explanation There was not enough memory for RCP or RSH to allocate memory.

Recommended Action Wait for memory to become available, or add more memory.

Error Message

`%RCMD-4-NORSHPROC: Rsh Process Fork failed`

Explanation Creation of the rsh daemon failed. This is usually caused by a lack of resources such as memory or vty.

Recommended Action Wait for resources to become available.

Error Message

`%RCMD-4-RCMDDNSFAIL: DNS hostname/ip address mismatch`

Explanation The IP address for an incoming rcmd request is not registered with DNS.

Recommended Action Add the IP address to DNS.

Error Message

`%RCMD-4-RCPATTEMPTED: Remote copy denied`

Explanation An attempt was made to connect to a router through RCP, but the router was not configured as an RCP server.

Recommended Action Configure an RCP server.

Error Message

`%RCMD-4-RSHATTEMPTED: Remote shell denied`

Explanation An attempt was made to connect to a router through rsh, but the router was not configured as an rsh server.

Recommended Action Configure an rsh server.

Error Message

`%RCMD-4-RSHPORTATTEMPT: Attempted to connect to RSHELL port`

Explanation An attempt was made to connect to a router through the rshell port (514), but the router was not configured as an RSH or RCP server.

Recommended Action Configure an RSH or RCP server.

REGEXP Error Message

Regular expression parser error messages

Error Message

`%REGEXP-2-BADLIST: Regular expression access check with
bad list [dec]`

Explanation An internal software error occurred.

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

REMIF Error Messages

Remote interface error messages

Error Message

%REMIF-3-BADCMD: [dec] from [inet]

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%REMIF-3-CLOSED: [chars] has released [chars]

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%REMIF-3-DUOPEN: [chars] is already open by [chars]

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%REMIF-3-IFNONE: [chars] does not exist. Requested by [chars]

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%REMIF-3-IQUEUE: Input on [chars]

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%REMIF-3-NOMEM: No available memory for [chars]

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%REMIF-3-OPEN: [chars] now owns [chars]

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%REMIF-3-OQUEUE: Output on [chars]

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%REMIF-3-TCPERR: TCP error, status [dec]

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

RIP Error Message

IP Routing Information Protocol error message

Error Message

`%RIP-3-NOSOCKET: Unable to open socket`

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.

RSP Error Messages

Route Switch Processor error messages

Error Message `HSA not supported in this release, please remove one RSP2`

Explanation High System Availability (HSA) supports two RSP2s on the router. One RSP2 operates as the master, and the other operates as the slave, which takes over if the master RSP2 fails.

Recommended Action For the HSA feature to function properly, both RSP2s require the same boot-ROM version, the same Cisco IOS release (Cisco IOS Release 11.1(4) or later), and the same DRAM configuration. The minimum DRAM required is 24 MB. Call your technical support representative to order software and memory components.

Error Message

`%RSP-3-AIPPPANIC: Panic: [chars] %08x %08x %08x %08x`

Explanation This message occurs when an ATM Interface Processor (AIP) crashes and can send out a message indicating where and why it crashed.

Recommended Action Record the information and call your technical support representative for assistance. Reload the microcode into the AIP.

Error Message

%RSP-2-ANOTHER: Another RSP detected

Explanation A second RSP exists in a dual configuration system and the software cannot support the configuration.

Recommended Action Remove one of the RSPs from the chassis. This condition can also be caused by a hardware problem, in which case it might be necessary to replace the RSP or the backplane

Error Message

%RSP-3-BADHWREV: [chars] (slot [dec]) has wrong hardware revision [dec].[dec]

Explanation The hardware in the indicated slot needs to be upgraded for operation with the RSP.

Recommended Action Upgrade the board.

Error Message

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

Explanation This message indicates the part containing the MAC addresses allocated to this chassis could not be accessed or was found to be corrupt, either due to a hardware problem or manufacturing problem.

Recommended Action Report this error to your technical support representative.

Error Message

%RSP-3-ERROR, 0, NULL

Explanation This message can take many forms. It provides information about a software error.

Recommended Action Report this error to your technical support representative.

Error Message

%RSP-3-FOREVER, MSG_TRACEBACK, cmd [dec] to [chars][dec] took [dec] usecs, done [hex]

Explanation A command from the RSP to an IP took longer than expected.

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

Error Message

%RSP-3-IDPROM: Bad or missing ID EEPROM, controller type [dec]

Explanation The ID EEPROM on the RSP is missing or bad.

Recommended Action This message indicates a manufacturing error. Report this error to your technical support representative.

Error Message

%RSP-3-IPC: [chars] [chars]

Explanation An IPC error occurred. The details about what was attempted and what went wrong will be printed.

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

%RSP-3-LOVEGIANT: Card [chars] wants [dec] byte love letters, but only got [dec] bytes

Explanation An inconsistency between the microcode and the system code was detected.

Recommended Action Report this error to your technical support representative.

Error Message

`%RSP-3-LOVENOTE: corrupt lovenote %08x: %04x %04x %04x %04x %04x %04x %08x`

Explanation This message indicates miscommunication between the RSP and an IP.

Recommended Action Report this error to your technical support representative.

Error Message

`%RSP-3-MSDOG: Master/slave watchdog timed out`

Explanation The system software failed to reset the master/slave watchdog timer, causing it to time out. This could indicate a software problem or a hardware problem.

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

`%RSP-3-MSFIX: Fixing [chars] by setting to default [chars]`

Explanation Where [chars] can be the slave or the master.

The ROM monitor default slave setting is out of sync with the system configuration file specifications. During bootup, the system image detects this and modifies the ROM monitor setting to conform with these specifications.

This is most likely the result of a new RSP being installed and booted in an HSA environment (dual RSPs) for the first time. Alternatively, in established HSA configurations, this message may be the result of a previous IPC error, during a reconfiguration of the HSA environment.

Recommended Action

- 1 Using the **show version** or **show boot** command, determine which slot contains the current slave.
- 2 Using the **show config** command, determine which slot has been specified as the default slave. If there is no **slave default-slot n** command in the config file, the value defaults to the highest numbered cpu slot (3 on a 7507, and 7 on a 7513).

If the slot number obtained in step 1 is the same as the number obtained in step 2, then no further action is required.

However, if the two slot numbers differ, and you have configured HSA in a manner in which the current slave slot matters (see below), then you should consider reloading the router again, now that the ROM monitor's default slave settings have been fixed. After the reload, the actual slave will match the default slave specified (or inferred) in the system configuration file.

For details of various HSA configuration modes consult the *Configuration Fundamentals Configuration Guide*, in the “Loading System Images, Microcode Images and Configuration Files” chapter, in the “Configuring High System Availability Operation” section (Cisco 7500 Series only). Users that have configured HSA in simple hardware backup mode don't need to worry about which RSP is currently the slave, since both RSPs are identical.

However, users that have configured HSA in software error protection mode will have different images running, depending on which RSP is currently the slave. If these users find that the slot numbers discovered in steps 1 and 2 differ, then they should reload their router to ensure that the desired system image is running.

Error Message

```
%RSP-3-NOIDB: bad vc %x on %x
```

Explanation The router contains a MIP interface. An internal software error occurred on either the RSP or the MIP.

Recommended Action Call your technical support representative for assistance.

Error Message

```
%RSP-3-NOLOVE: Corrupt lovenote: %08x %08x %08x %08x
```

Explanation This message indicates miscommunication between the RSP and an IP.

Recommended Action Report this error to your technical support representative.

Error Message

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

Explanation No MAC address was available for allocation to the specified interface.

Recommended Action Report this error to your technical support representative.

Error Message

`%RSP-2-NOMEMORY: No memory available for [chars], MSGDEF_LIMIT_SLOW`

Explanation An attempt at memory allocation failed.

Recommended Action Try these actions to remedy the problem:

- Add memory.
- Disable some features.
- Apply filtering to decrease the size of system data structures—the routing table, for example.

In general, reduce other system activities to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

`%RSP-3-NOSTART: No microcode for [chars] card, slot [dec]`

Explanation No microcode is defined or available for the specified card.

Recommended Action Reconfigure the card to specify an existing microcode file.

Error Message

`%RSP-2-QAERROR: [chars] error, [chars] at addr %04x ([chars])\n log %08x, data %08x %08x`

Explanation A software error was detected during packet switching.

Recommended Action Call your technical support representative for support.

Error Message

`%RSP-3-RESTART, 0, NULL`

Explanation The cBus buffer memory was reset and reallocated.

Recommended Action Report this error to your technical support representative, if memory is not reset manually (by changing the MTU on an interface, for example).

Error Message

`%RSP-3-RESTARTREQ, MSG_TRACEBACK, [chars]`

Explanation Some part of the software requested that cBus buffer memory be reset and reallocated.

Recommended Action Report this error to your technical support representative, if memory is not reset manually (by changing the MTU on an interface, for example).

Error Message

`%RSP-3-SLAVEMASTER: Slave stole mastership`

Explanation The master detected that the slave had taken mastership of the router. The old master will reload and become the slave, letting the new master take over. This indicates a software or hardware error.

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

`%RSP-5-SLAVEUP: Slave changed to state Running`

Explanation This is an informational message to indicate that the slave RSP has started running the slave image. You should see this message after the router boots or after the **slave reload** global configuration command is issued on the master.

Recommended Action No action required.

Error Message

`%RSP-2-STALL: partially inserted or removed IPs on cyBus[dec]`

Explanation Most likely, a board is not fully seated in the chassis. A less likely possibility is a hardware problem with the RSP or backplane.

Recommended Action Try reseating the boards. Call your technical support representative for assistance if this message persists.

Error Message

`%RSP-3-XBUFHDR: corrupt bufhdr [hex]: %08x %08x %08x %08x`

Explanation Miscommunication occurred between the RSP and an IP.

Recommended Action Report this error to your technical support representative.

RSRB Error Messages

Remote source-route bridging error messages

Error Message

`%RSRB-4-BADLEN: Peer [chars], [chars], bad length [dec], trn [dec]`

`%RSRB-4-BADLENIP: Peer [dec]/[inet], [chars], bad length [dec], trn [dec]`

Explanation An internal software error occurred.

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

Error Message

```
RSRB-3-BADVERSIONFST: FST in: [chars]: version mismatch, mine [dec],  
theirs [dec]
```

```
%RSRB-3-BADVERSIONIF: IF in: [chars]: version mismatch,  
mine [dec], theirs [dec]
```

Explanation The remote end of a direct serial peer is running the wrong version of the system software. Either the local end, the remote end, or both are not up to date.

Recommended Action Call your technical support representative for an update.

Error Message

```
%RSRB-3-BADVERSIONTCP: [chars]: [dec]/[inet]: version  
mismatch, mine [dec], theirs [dec]
```

Explanation The remote end of a TCP remote peer is running the wrong version of the system software. Either the local end, the remote end, or both are not up to date.

Recommended Action Call your technical support representative for an update.

Error Message

```
%RSRB-4-BADVRE: Bad vre type
```

```
%RSRB-4-CONIPST: Peer [dec]/[inet], CONN, illegal state  
[dec]
```

```
%RSRB-4-CONNILLSTATE: Peer [dec]/[inet], CONN, illegal  
state [dec]
```

```
%RSRB-4-CONNSTAT: Peer [dec]/[interface], IFin, bad  
connection 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

```
%RSRB-3-FSTERR: [char]: [char]: [inet], op [hex], len  
[dec], trn [dec]
```

Explanation The remote end of a direct serial RSRB connection detected a configuration problem or traffic that is not recognized by the configuration.

Recommended Action Examine the configuration on both sides of the serial connection for possible problems. Examine the traffic being offered for propagation with respect to the configuration. The destination target ring is denoted by the value of `trn`.

Error Message

```
%RSRB-3-HDRNOVRP: Peer [inet], HDR, no vrp
```

```
%RSRB-4-HDRRECV: Peer [dec]/[inet], HDR, recv state invalid, not  
empty [dec]
```

```
%RSRB-3-HDRVRP: Peer [dec]/[inet], HDR, vrp state wrong, [dec]
```

Explanation An internal software error occurred.

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

Error Message

```
%RSRB-3-IFERR: [chars]: [chars]: [chars], op [hex], len  
[dec], trn [dec]
```

Explanation The remote end of a direct serial RSRB connection detected a configuration problem or traffic that is not recognized by the configuration.

Recommended Action Examine the configuration on both sides of the serial connection for possible problems. Examine the traffic being offered for propagation with respect to the configuration. The destination target ring is denoted by the value of `trn`.

Error Message

%RSRB-4-ILLPEER: Peer [chars] [[hex]], illegal state [dec]

%RSRB-4-LOCAL: Unit [dec], local/vring set
simultaneously, vrn [dec]

Explanation An internal software error occurred.

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

Error Message

%RSRB-3-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

%RSRB-3-NOTREM: Null idb and not remote

%RSRB-4-OPTNULL: Remopened and t NULL

%RSRB-4-PEERSTAT: Peer [chars], wrong 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

%RSRB-4-RNGXFAIL: Ring exchange failure, resetting peer: [chars]

Explanation The RSRB peer initiation logic failed due to a memory shortage or congestion condition.

Recommended Action The problem should clear and the peers should re-open without operator intervention.

Error Message

%RSRB-3-SENDPUNTFST : [chars]: sent [chars] to [dec]/[chars]

%RSRB-3-SENDPUNTIF: [chars]: sent [chars] to [dec]/[chars]

Explanation The local end of a direct serial RSRB connection detected a configuration problem or traffic that is not recognized by the configuration.

Recommended Action Examine the configuration on both sides of the serial connection for possible problems. Examine the traffic being offered for propagation with respect to the configuration.

SDLC Error Messages

Synchronous Data Link Control error messages

Error Message

%SDLC-4-CTRLBAD: Interface [chars], Invalid control field

Explanation A bad SDLC frame was received.

Recommended Action If this message recurs, check the SDLC serial line and the devices attached to it.

Error Message

%SDLC-4-DROPPED: Dropped X.25 packet from SDLC hold queue

Explanation An SDLC frame had to be dropped from the output hold queue, usually because of excessive congestion on the output link.

Recommended Action If this message occurs frequently, determine why your SDLC link is being overloaded with data and resolve the cause (typically by either increasing bandwidth to your SDLC line or reducing the load on your link).

Error Message

%SDLC-4-FRAMEERR: Interface [chars], Frame error:
CF [hex], VS [dec] [char] VR [dec], Reason [hex]

Explanation A FRMR frame was received. This can be due to a noisy serial line, an overloaded SDLC device, or corrupted data.

Recommended Action If this message recurs, service the serial line and the devices attached to it.

Error Message

%SDLC-2-ILLEGSTATE: Illegal state, [hex] [dec]

Explanation An internal SDLC state violation was detected.

Recommended Action Record the entire error message and call your technical support representative for assistance.

Error Message

%SDLC-4-INFOBAD: Interface [chars], Info field not permitted

%SDLC-4-INVNR: Interface [chars], Invalid NR value

Explanation A bad SDLC frame was received.

Recommended Action If any of these messages recur, check the SDLC serial line and the devices attached to it.

Error Message

%SDLC-4-INVLDGRPPOLL: Interface [chars], Invalid group-poll frame,
10

Explanation An unnumbered poll (UP) was received with the wrong group poll address.

Recommended Action Make sure the group poll address configured on the router matches the one configured in the PU macro (GP3174=XX) in the NCP generate file.

Error Message

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

Explanation Insufficient memory available.

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

Error Message

%SDLC-4-NOFRMRSPACE: Cannot allocate a FRMR frame

Explanation The router needed to generate an FRMR frame but could not allocate the necessary memory for the frame.

Recommended Action The fact that memory is so low that it cannot allocate the frame is far more serious than the reason for generating the FRMR. Fix the cause of low memory, and if the problem still occurs, determine why the FRMR must be sent.

Error Message

%SDLC-3-NOINPIDB: Input idb not set

Explanation This is a software error. A frame was given to the SDLC handler to process, but the interface on which the frame arrived is not known.

Recommended Action Call your technical support representative for assistance.

Error Message

%SDLC-2-NOPOINTER: AW_SDLC_SEC with no sdllc_llc pointer

Explanation An error condition occurred during SDLLC initiation.

Recommended Action No action is required. The SDLLC session will restart without operator intervention.

Error Message

%SDLC-4-NOUA: Interface [chars], address %02x non UA frame is received in response to SNRM, 99999

Explanation The router received a frame other than a UA in response to a SNRM.

Recommended Action Check the end station to see if the SNA stack is up and running.

Error Message

%SDLC-3-NULLPAK: Interface [chars], NULL packet ptr, rvr [dec], vs [dec], vr [dec]

Explanation An internal software error occurred in the router's SDLC processing system.

Recommended Action Call your technical support representative for assistance.

Error Message

%SDLC-4-SDLC_ERR: SDLC_ERROR with no poll

Explanation A protocol error was detected on a secondary station, but FRMR could not be sent because the station did not own the poll bit. This message indicates either poor line conditions or a faulty SDLC implementation.

Recommended Action If the message recurs, perform traces on the SDLC line. Call your technical support representative for assistance.

Error Message

%SDLC-4-UNKNOWNADDR: Received input for unknown addr/input addr [hex]. Tossing frame.

Explanation SDLC frames were received from an unknown (unconfigured) SDLC address.

Recommended Action Either configure the station for SDLLC or STUN, or shut down the serial interface to disable the line. Call your technical support representative for assistance.

Error Message

%SDLC-4-WRONGADDR: [interface], data from wrong address, expected [addr], received [addr]

Explanation This condition typically occurs on multidropped lines when the T1 timer interval is too short or the **sdlc line-speed** command is not configured. In rare cases the RTS/CTS handshake can delay the transmission of a frame so long that a response is returned after the next station is polled.

Recommended Action Adjust the value of the **sdlc line-speed** statement in the configuration file. (Either take line traces to observe appropriate T1 timer intervals, or adjust empirically.)

SDLLC Error Messages

Synchronous Data Link Control/ Logical Link Control type 2 translation error messages

Error Message

%SDLLC-5-ACT_LINK: SDLLC: [chars] LINK address [hex] ACTIVATED: [chars]

Explanation An SDLLC media conversion session was activated.

Recommended Action No action is required.

Error Message

%SDLLC-5-DACT_LINK: SDLLC: [chars] LINK address [hex] DEACTIVATED: [chars]

Explanation An SDLLC media conversion session was deactivated. If deactivation is a result of an error condition, this message will include a reason.

Recommended Action If the message does not include a description of an error, the deactivation was normal and the message is for information only. If the message does include a description of an error, begin problem analysis. Determine whether session loss is related to LLC2 timers by issuing the **debug llc2-err** command. If the problem is related to LLC2 timers, consider using SDLLC with the local acknowledgment feature. Call your technical support representative for assistance.

SEC Error Messages

Error Message

```
%SDLLC-6-XID_DISPLAY: sa [enet] da [enet] ss [hex] ds [hex]
[%02x%02x%02x%02x]
```

Explanation This message supplies the information for the received and rejected XID.

Recommended Action See the SDLLC-6-XID_NOMATCH error message.

Error Message

```
%SDLLC-6-XID_FORMAT: Unsupported XID format received, format [dec]
```

Explanation An inappropriate XID format was received for this mode of SDLLC operation. Review the type of devices you are connecting with SDLLC to make sure they are supported.

Recommended Action See the SDLLC-6-XID_NOMATCH error message.

Error Message

```
%SDLLC-4-XID_NOMATCH: [chars], XID mismatch for %02x. CONNECTION
REJECTED
```

Explanation An inbound XID from a PU 2.0/PU 2.1 node was rejected. The targeted SDLC address is displayed. The XID information is displayed in a subsequent message—SDLLC-6-XID_DISPLAY or SDLLC-6-FORMAT.

Recommended Action This is a security feature. Additional information is displayed to help trace the source of the rejected XID. If the message is undesirable, simply remove the XID statement from the router configuration.

SEC Error Messages

IP security error messages

Error Message

```
%SEC-6-IPACCESSLOGDP: list [dec] [chars] [chars] [inet] -> [inet]
([dec]/ [dec]), [dec] packet[chars]
```

Explanation A packet matching the log criteria for the given access list was detected.

Recommended Action Informational message only. No action required.

Error Message

```
%SEC-6-IPACCESSLOGNP: list [dec] [chars] [dec] [inet] -> [inet],
[dec] packet[chars]
```

Explanation A packet matching the log criteria for the given access list was detected.

Recommended Action Informational message only. No action required.

Error Message

```
%SEC-6-IPACCESSLOGP: list [dec] [chars] [chars] [inet]([dec]) ->
[inet]([dec]), [dec] packet[chars]
```

Explanation A packet matching the log criteria for the given access list was detected.

Recommended Action Informational message only. No action required.

Error Message

```
%SEC-3-NOMAX: No default for NLESO defined
```

```
%SEC-2-NOOPT: Box secured, no option on internal packet
```

```
%SEC-2-NOTSEC: First opt in tcb not BASIC security
```

```
%SEC-2-SECINS: Security opt in tcb not SECINSERT
```

Explanation An internal software error occurred.

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

SEC Error Messages

Error Message

%SEC-4-TOOMANY: Box secured, too many options on internal packet

Explanation No room for all desired IP header options. Packet discarded.

Recommended Action Configure for fewer IP header options.

SLIP Error Messages

Serial Line IP error messages

Error Message

`%SLIP-2-BADQUOTE: Impossible quoted character [hex]`

`%SLIP-2-BADSTATE: Impossible input state [hex]`

Explanation An internal software error occurred.

Recommended Action If either of these messages recurs, call your technical support representative for assistance.

SMRP Error Messages

Simple Multicast Routing Protocol error messages

Error Message

`%SMRP-2-ASSERTFAILED, MSG_PROCESS|MSG_TRACEBACK, SMRP assertion failed: [chars]`

Explanation The software detected an inconsistency. This is considered a serious error. The router attempts to continue, but SMRP processing may be impaired.

Recommended Action Copy the error message exactly as it appears, noting any SMRP problems that you are experiencing, and report it to your technical support representative.

Error Message

`%SMRP-7-DEBUGMSG: SMRP Debug: [chars]`

Recommended Action This message is generated by some **debug** commands to provide additional information about conditions in SMRP.

Recommended Action If you are experiencing problems in SMRP, these messages should be provided, along with any other information, in a report to your technical support representative.

Error Message

%SMRP-5-NEIGHBORDOWN: [chars]: SMRP neighbor down - [chars]

Explanation A neighboring SMRP router is now down.

Recommended Action Notification message only. No action required.

Error Message

%SMRP-6-NEIGHBORUP: [chars]: SMRP neighbor up - [chars]

Explanation A neighboring SMRP router has appeared.

Recommended Action Notification message only. No action required.

Error Message

%SMRP-3-NOFDDICOMPAT: SMRP port [chars] disabled; pre-fdditalk not supported

Explanation SMRP cannot be started on an interface that is running pre-FDDITalk.

Recommended Action Use FDDITalk on the FDDI ring if possible.

Error Message

%SMRP-5-PORTDOWN: [chars]: SMRP port down - [chars]

Explanation An SMRP port is down and is no longer operational.

Notification message only. No action required.

Error Message

%SMRP-6-PORTUP: [chars]: SMRP port up - [chars]

Explanation An SMRP port has come up.

Recommended Action Notification message only. No action required.

SNAPSHOT Error Messages

Snapshot dial-on-demand routing error messages

Error Message

%SNAPSHOT-2-BADSTATE: Bad state for Snapshot block [chars][[dec]], location [dec]

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%SNAPSHOT-2-NOMEMORY: Unable to create Snapshot SAB. Updates will NOT be sent, MSGDEF_LIMIT_SLOW

Explanation The router is running out of memory, which impacts the operation of snapshot.

Recommended Action Check memory usage of the router. Call your technical support representative for assistance.

Error Message

%SNAPSHOT-2-TOOMANYDIALERS: Exceeded maximum dialer interfaces to watch. Ignoring [chars]

Explanation Snapshot is being used over more than 100 DDR interfaces.

Recommended Action Don't use snapshot over more than 100 DDR interfaces.

SNMP Error Messages

Simple Network Management Protocol error messages

Error Message

`%SNMP-4-NOTRAPIP: SNMP trap source [chars] has no ip address`

Explanation The user entered an **snmp-server trap-source** command. The interface requested for use as the source address has no address associated with it. The SNMP trap is being sent anyway, but without the source address that the user intended.

Recommended Action There are two possible solutions. Either enter a **no snmp-server trap-source** command to disable the request for a specific source IP address, or add an IP address to the interface referenced in the **snmp-server trap-source** configuration command.

Error Message

`%SNMP-3-SOCKET: can't open UDP socket`

Explanation The SNMP server was unable to open a port for receiving SNMP requests. This usually happens when the SNMP server is started using the **snmp-server community** configuration command on a router or communication server with an interface that has no IP address configured. Another possible cause is low memory.

Recommended Action Configure at least one interface with an IP address or specify the **no snmp-server** command to remove the SNMP server process. Call your technical support representative if problems persist or if it becomes necessary to add memory.

SSE Error Messages

Silicon switching engine error messages

Error Message

`%SSE-3-BADMEMORY: SSE memory failure detected`

Explanation A memory error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

`%SSE-6-COMPERR: SSE compilation failure -- [chars],
MSGDEF_LIMIT_FAST`

Explanation A software failure occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

`%SSE-2-HUNG: SSE hung -- [chars]`

Explanation The SSE is hung.

Recommended Action Reboot the SSE.

Error Message

`%SSE-2-HWFAILURE: SSE hardware failure-- [chars] code [hex]`

Explanation A hardware error occurred, indicating an unexpected condition on the SSP board.

Recommended Action It might be necessary to replace the SSP. Call your technical support representative for assistance.

SSE Error Messages

Error Message

%SSE-2-MEMERROR: SSE memory failure, address [hex] expected [hex], got [hex]

Explanation A hardware error occurred, indicating memory failure on the SSP board.

Recommended Action It might be necessary to replace the SSP. Call your technical support representative for assistance.

Error Message

%SSE-3-NOMEMORY: No memory available for [chars]

Explanation An 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

%SSE-2-NOTZERO: Program memory does not start at zero

Explanation A hardware error occurred, indicating an unexpected condition on the SSP board.

Recommended Action It might be necessary to replace the SSP. Call your technical support representative for assistance.

Error Message

%SSE-2-SWFAILURE: SSE software failure -- [chars] [hex]

Explanation A software failure occurred.

Recommended Action Call your technical support representative for assistance.

STANDBY Error Messages

Hot Standby Router Protocol error messages

Error Message

```
%STANDBY-3-BDAUTH: Bad authentication from [inet], remote state [chars]
```

Explanation Two routers participating in the Hot Standby protocol disagree on the valid authentication string.

Recommended Action Use the **standby authentication** interface command to repair the Hot Standby protocol authentication discrepancy between the local system and the one whose IP address is reported.

Error Message

```
%STANDBY-3-MISCONFIG: Attempt to change [chars] MAC address to [enet] when DECNET already running
```

Explanation A software or hardware error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

```
%STANDBY-3-NOBUFFER: No buffer available for sending HELLO
```

Explanation The Hot Standby protocol 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

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

Explanation The system was unable to initialize the Hot Standby protocol on an interface. The system may be out of memory.

Recommended Action Record the output from the following commands: **show proc mem** (repeated twice), **show mem**, **show version**, **write terminal**. Provide this information to your technical support representative.

Error Message

`%STANDBY-3-NOSOCKET: Unable to open socket`

Explanation The system was unable to initialize an IP connection for the Hot Standby protocol.

Recommended Action Make sure that there is at least one interface configured to run IP.

STUN Error Messages

Serial tunneling error messages

Error Message

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

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

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

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

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

```
%STUN-3-CONNILLSTATE: 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

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

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

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

Error Message

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

Explanation An internal software error occurred.

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

Error Message

%STUN-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 STUN group. If memory shortages persist, call your technical support representative for assistance.

Error Message

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

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

Recommended Action This error message should only print when the router is critically short of memory. Call your technical support representative for assistance.

Error Message

%STUN-3-NOTGEM: No memory for STUN protocol sdlc-tg definition

Explanation A software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%STUN-2-NOTGI: Please remove and redefine protocol group [dec]

Explanation An internal error occurred. The configuration is irregular.

Recommended Action Remove and reconfigure the STUN protocol group. Record the configuration and call your technical support representative for assistance.

Error Message

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

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

%STUN-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

%STUN-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 STUN reconfiguration or disabling. This is good, expected behavior.

Recommended Action Informational message only. No action required.

Error Message

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

Explanation An internal software error occurred.

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

SUBSYS Error Messages

Error Message

`%STUN-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

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

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

Explanation An internal software error occurred.

Recommended Action If either of these messages recurs, call your technical support representative for assistance.

Error Message

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

Explanation A remote peer closed a STUN 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

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

Explanation This route closed a STUN 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.)

SUBSYS Error Messages

Software subsystem error messages

Error Message

%SUBSYS-2-BADCLASS: Bad subsystem class [dec] - ignoring subsystem

Explanation A software consistency check failed.

Recommended Action Call your technical support representative for assistance.

Error Message

%SUBSYS-2-BADVERSION: Bad subsystem version number [dec] - ignoring subsystem

Explanation A software consistency check failed.

Recommended Action Call your technical support representative for assistance.

Error Message

%SUBSYS-2-MISMATCH: Kernel and subsystem version differ [dec.dec]

Explanation A software consistency check failed.

Recommended Action Call your technical support representative for assistance.

Error Message

%SUBSYS-2-NOTFOUND: Subsystem [chars] needs subsystem [chars] to start

Explanation A software consistency check failed.

Recommended Action Call your technical support representative for assistance.

SYS Error Messages

Operating system error messages

Error Message

%SYS-2-ALREADYFREE: Buffer [hex] already in free pool [chars]

%SYS-3-BADBLOCK: Bad block pointer [hex]

%SYS-3-BADDISP: Bad dispose code [hex] in [chars]

%SYS-3-BADFREEMAGIC: Corrupt free block at [hex] (magic [hex])

Explanation A block of memory is corrupt at the indicated location.

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

Error Message

%SYS-3-BADFREEPTRS: Bad [chars] pointer [hex] at [hex] ([chars] = [hex])

Explanation A pointer in the block header at the indicated location is corrupt.

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

Error Message

%SYS-3-BADLINKTYPE: Unexpected linktype [dec]

Explanation A software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%SYS-2-BADLIST: Regular expression access check with bad list [dec]

Explanation A software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%SYS-3-BADMAGIC: Corrupt block at [hex] (magic [hex])

Explanation The free memory pool is corrupted.

Recommended Action Call your technical support representative for assistance.

Error Message

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

Explanation A software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%SYS-2-BADPID: Bad pid [dec] for tty [t-line]

%SYS-2-BADPOOL: Attempt to return buffer with corrupt pool pointer, ptr= [hex], pool= [hex]

%SYS-2-BADPOOLMAGIC: Attempt to use pool pointer with corrupt header, pool= [hex]

%SYS-2-BADSHARE: Bad sharecount in [chars], ptr=[hex],count=[hex]

%SYS-2-BADSTACK: Process [chars] has trashed stack, old size [dec]

%SYS-6-BLKINFO: [chars]blk [hex], words [dec], alloc [hex][chars] RZ offset [dec], dealloc [hex], rfcnt [hex]

%SYS-2-CFORKLEV: cfork at level [dec]

Explanation An internal software error occurred.

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

Error Message

`%SYS-3-BADRESID: Clock hardware returned bad residual [dec]`

Explanation A software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

`%SYS-2-BLOCKHUNG: Task hung with blocking disabled, value = [hex]`

Explanation A software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

`%SYS-2-CHUNKBOUNDS: Attempted to exceed freelist chunk bounds chunk [hex], data [hex],`

Explanation A software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

`%SYS-2-CHUNKFREE, MSG_TRACEBACK | MSG_PROCESS, Attempted to free non-chunk memory, chunk [hex], data [hex], 10 * ONESEC`

Explanation A software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

`%SYS-2-CHUNKPARTIAL, MSG_TRACEBACK | MSG_PROCESS, Attempted to destroy partially full chunk, chunk [hex], 10 * ONESEC`

Explanation A software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%SYS-2-CHUNKSIBLINGS, MSG_TRACEBACK | MSG_PROCESS, Attempted to destroy chunk with siblings, chunk [hex], 10 * ONESEC

Explanation A software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%SYS-5-CONFIG: Configured from [chars] by [chars]

%SYS-5-CONFIG_I: Configured from [chars] by [inet]

%SYS-5-CONFIG_L: Configured via LNM from [enet]

%SYS-5-CONFIG_M: Configured via MOP from [chars]
by [enet]

Explanation The router's configuration was changed.

Recommended Action Notification messages only. No action required.

Error Message

%SYS-4-CONFIG_NEWER: Configurations from version [dec].[dec] may not be correctly understood.

Explanation The boot image parses the configuration saved in NVRAM and encounters a configuration file written by a newer IOS software version. (During the netboot process, the boot image will ignore the newer features.)

Recommended Action No action is required.

SYS Error Messages

Error Message

%SYS-5-CONFIG_NV: Non-volatile store configured from [chars] by [chars]

%SYS-5-CONFIG_NV_M: Non-volatile store configured via MOP from [chars] by [enet]

Explanation The configuration was written successfully through the Maintenance Operation Protocol (MOP).

Recommended Action No action required.

Error Message

%SYS-3-CONFIG_NV_ERR: Non-volatile store write error - configuration failed

Explanation The write of the nonvolatile configuration failed.

Recommended Action If this message recurs, contact your technical support representative for assistance.

Error Message

%SYS-3-CPUHOG: Task ran for [dec] msec. Process = [chars], PC = [hex]

Explanation A software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%SYS-4-DUAL_MESSAGE: SNMP system message request [dec] denied due to pending job

Explanation A software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%SYS-2-DUPEEXPORT: Duplicate export vector [chars] registration attempt

Explanation An internal software error occurred.

Recommended Action If this message recurs, contact your technical support representative for assistance.

Error Message

%SYS-2-FREEBAD: Attempted to free memory at [hex], not part of buffer pool

%SYS-2-FREEFREE: Attempted to free unassigned memory at [hex], alloc [hex] dealloc [hex]

%SYS-2-GETBUF: Bad getbuffer, bytes= [dec]

%SYS-3-HARIKARI: Process [chars] top-level routine exited

%SYS-2-HEADER: Attempt to return buffer with invalid buffer header, ptr= [hex]

Explanation An internal software error occurred.

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

Error Message

%SYS-2-INLIST: Buffer in list, ptr= [hex]

%SYS-2-INLIST1: Buffer in list, ptr= [hex],
caller= [hex]

%SYS-2-INPUTQ: INPUTQ set, but no idb, ptr=[hex]

%SYS-2-INSCHED: [chars] within scheduler

%SYS-2-INTSCHED: [chars] at level [dec]

%SYS-3-INUSEFREE: Block [hex] on free list [dec] in use

Explanation An internal software error occurred.

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

Error Message

%SYS-3-INVMEMINT: Invalid memory action ([chars]) at interrupt level

Explanation This message indicates that a memory allocation or deallocation was attempted from an interrupt handler.

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

Error Message

%SYS-2-LINKED: Bad enqueue of [hex] in queue [hex]

%SYS-2-LINKED: Bad p_dequeue of [hex] in queue [hex]

%SYS-2-LINKED: Bad p_requeue of [hex] in queue [hex]

%SYS-2-LINKED: Bad requeue of [hex] in queue [hex]

%SYS-2-LOWMEM: Low memory debug exception (limit =[dec] free = [dec])

Explanation The router is running short on memory.

Recommended Action It may be necessary to free some memory by exiting a program. If this message recurs, call your technical support representative for assistance.

Error Message

```
%SYS-3-MGDTIMER, MSG_TRACEBACK | MSG_PROCESS, [chars][chars], timer  
= [hex], 10 * ONESEC
```

Explanation A software or hardware error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

```
%SYS-3-MGDTIMEREXP, MSG_TRACEBACK | MSG_PROCESS, Unknown timer  
expiration, timer = [hex], type [dec], 10 * ONESEC
```

Explanation The process received an expiration notice for a timer that does not belong to it.

Recommended Action Call your technical support representative for assistance.

Error Message

```
%SYS-3-MSGLOST: [dec] messages lost due to queue overflow
```

Explanation A software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

```
%SYS-6-MTRACE: [chars]: addr, pc [hex], [hex] [hex], [hex] [hex],  
[hex] [hex], [hex] [hex], [hex] [hex], [hex] [hex], [hex] [hex], [hex]
```

Explanation The free memory pool is corrupted.

Recommended Action If this message recurs, contact your technical support representative for assistance.

Error Message

%SYS-2-NOBLOCK: [chars] with blocking disabled

Explanation An internal software error occurred.

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

Error Message

%SYS-6-NOBRIDGE: Bridging software not present

Explanation Your system is not equipped to be a bridge.

Recommended Action Install the bridging software option.

Error Message

%SYS-1-NOECO: WARNING: This 500-CS cannot run this version of software. Please contact Customer Service for upgrade information. tele: 1 (800) 553-NETS 1 (415) 903-7208 email: cs-rep@cisco.com Hardware burned in address is [enet]

Explanation An Error Change Order (ECO) is needed.

Recommended Action Call your technical support representative for assistance.

Error Message

%SYS-2-NOMEMFRG: Memory fragmentation check debug exception (fragment size [dec])

Explanation The system detected an error checking memory fragmentation.

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

Error Message

%SYS-2-NOMEMORY: No memory available for [chars] [dec]

Explanation An 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

%SYS-3-NOPROC: Process table full

%SYS-2-NOTDEAD: Re-killing process [chars], pid [dec]

%SYS-2-NOTQ: p_unqueue didn't find [hex] in queue [hex]

%SYS-2-NOTQ: unqueue didn't find [hex] in queue [hex]

%SYS-3-NULLIDB: Null idb in [chars]

Explanation An internal software error occurred.

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

Error Message

%SYS-2-NOPROCESS: No such process [dec]

Explanation An internal software error occurred.

Recommended Action If this message recurs, contact your technical support representative for assistance.

Error Message

%SYS-3-NZREFCNT: Block [hex] on free list [dec] with ref count [dec]

Explanation A block of memory in the free pool is actually in use. The number of processes using the memory block is indicated.

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

Error Message

%SYS-5-OUTSETUP: Configuration file [chars] accepted, aborting setup

Explanation A configuration was accepted through the network, so the setup session will be aborted.

Recommended Action No action required.

Error Message

%SYS-3-OVERRUN: Block overrun at [hex] (redzone [hex])

Explanation An internal software error occurred.

Recommended Action If this message recurs, contact your technical support representative for assistance.

Error Message

%SYS-1-OVERTEMP: System detected OVER TEMPERATURE condition.
Please resolve cooling problem immediately!

Explanation The environmental monitor detected a high temperature condition.

Recommended Action Make sure room temperature is not too high and that air flow to the card is not blocked. If this condition persists, the environmental monitor may shut the system down. Call your technical support representative for assistance, if necessary.

Error Message

%SYS-2-PAKCLIP: Bad pak_clip, bytes= [dec]

Explanation A software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%SYS-2-QCOUNT: Bad dequeue [hex] count [dec]

%SYS-2-QCOUNT: Bad p_dequeue [hex] count [dec]

%SYS-2-QCOUNT: Bad p_unqueue [hex] count [dec]

%SYS-2-QCOUNT: Bad unqueue [hex] count [dec]

%SYS-2-QINSERT: Unable to add [chars] to queue - no elements

%SYS-4-REGEXP: [chars]

Explanation An internal software error occurred.

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

Error Message

%SYS-3-REGARG: Registry service [chars] has too many arguments

Explanation An internal software consistency check failed.

Recommended Action Call your technical support representative for assistance.

Error Message

%SYS-3-REGCREA2: Attempt to create registry service [chars] twice

Explanation An internal software consistency check failed.

Recommended Action Call your technical support representative for assistance.

Error Message

%SYS-3-REGDFLT: Attempt to add default twice to registry service

Explanation An internal software consistency check failed.

Recommended Action Call your technical support representative for assistance.

Error Message

%SYS-3-REGNONE: Registry [dec] service [dec] doesn't exist - [chars]

Explanation An internal software consistency check failed.

Recommended Action Call your technical support representative for assistance.

Error Message

%SYS-3-REGTYPE: Registry service [chars] is wrong type, should be [dec]

Explanation An internal software consistency check failed.

Recommended Action Call your technical support representative for assistance.

Error Message

%SYS-5-RELOAD: Reload requested

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

Explanation A reload or restart was requested.

Recommended Action Notification messages only. No action required.

Error Message

%SYS-4-RELOAD_ATTEMPT: Attempt via SNMP failed; system-shutdown not configured

Explanation A software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%SYS-2-RETBUFF: Bad retbuffer, ptr= [hex]

%SYS-2-RETBUFF1: Bad retbuffer, ptr= [hex],
caller= [hex]

%SYS-2-SELF: s_setblock() on own process

%SYS-2-SELFLINKED: Buffer [hex] linked to itself in free pool [chars]

%SYS-2-SHARED: Attempt to return buffer with sharecount
[dec],ptr= [hex]

%SYS-2-SHARED1: Attempt to return buffer with sharecount [dec], ptr=
[hex], caller= [hex]

%SYS-3-SOCKUNKN: Unknown socket protocol [dec]

%SYS-2-SPEC: Trying to set unknown special character
[dec] to [dec]

%SYS-6-STACKLOW: Stack for [chars] [chars] running low, [dec]/[dec]

Explanation An internal software error occurred.

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

Error Message

%SYS-2-SNMP0IDX, MSG_TRACEBACK | MSG_PROCESS, Attempt to [chars]
snmpidb with if_index of 0.

Explanation A software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%SYS-3-SUPNONE: Registry [dec] doesn't exist

Explanation A software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%SYS-2-SUPNOT: Can't create Registry [chars]

Explanation An internal software consistency check failed.

Recommended Action Call your technical support representative for assistance.

Error Message

%SYS-5-TABLEERR: [chars] table [chars] damaged: [chars]

Explanation An internal table entry became corrupted.

Recommended Action Call your technical support representative for assistance.

Error Message

%SYS-3-TIMERHOG, MSG_TRACEBACK, Timer callback ran long, PC = [hex],
10*ONESEC

Explanation A software error occurred.

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

Error Message

%SYS-3-TTYMEM: Tty[t-line], no memory to save tty default parameters

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

%SYS-2-WATCHDOG, MSG_TRACEBACK, Process aborted on watchdog timeout,
Process = [chars], ONESEC

Explanation The indicated process ran for such a long time without relinquishing the processor that the system killed it as a runaway.

Recommended Action If this error recurs, call your technical support representative for assistance.

Error Message

%SYS-3-WRONGFREELIST: Block [hex], size [dec], on wrong free list
([dec], [dec])

Explanation A freed buffer was placed on the wrong list of free buffers.

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

Error Message

%SYS-2-WRONGPOOL: Buffer [hex] found in pool [hex], should be in pool
[hex]

Explanation A software error occurred.

Recommended Action Call your technical support representative for assistance.

SYSMGT Error Message

System Management error message

Error Message

```
%SYSMGT_RPC-3-IPC_ERROR: SYSMGT RPC - IPC [chars] [chars] failed ([chars])
```

Explanation The Channel Interface Processor (CIP) card network management event processing subsystem failed to set up the Inter-Process Communications port. Network management events will not be processed from installed CIP cards.

Recommended Action Report this error to your technical support representative.

TAC Error Messages

Terminal Access Control protocol (TACACS) error messages

Error Message

```
%TAC-6-SENDTMO: Send type [dec] to [inet] timed out
```

Explanation A background TACACS notification (enabled with the command **tacacs notify**) was not acknowledged by the TACACS server processor within the timeout period (5 minutes). The information contained in that notification was lost. This may interfere with accounting or auditing on the server.

This condition arises when the TACACS server is misconfigured, crashed, or became unreachable via the network.

Recommended Action Check the TACACS server and the network attached to it.

Error Message

%TAC-4-UNEXREP: Reply for non-existent request, [dec] on queue

Explanation The TACACS facility received a message it was not expecting. This may occur when a TACACS server sends duplicate responses or when it responds to a request that has already timed out. It also may be due to an internal software problem.

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

TBRIDGE Error Messages

Transparent bridging error messages

Error Message

%TBRIDGE-6-GIANT, 0x0, Giant received on [chars], [dec] exceeds [dec]\n DA [enet] SA [enet] [0x%08x], (5 * ONESEC)

Explanation A packet was received that exceeds the expected maximum transmission unit (MTU) length for the receiving interface. The first four bytes of the packet following the source address are also provided to assist diagnosis.

Recommended Action Use the address and packet information provided to trace the source of these packets and reduce its MTU to conform to the standard for the given media.

Error Message

%TBRIDGE-4-INVALIDMEDIA: Invalid media encountered for bridging

Explanation Transparent bridging was configured on an interface that does not support it.

Recommended Action Remove transparent bridging from the configuration on the specified interface.

Error Message

%TBRIDGE-4-NOMEMORY: No memory available for transparent bridging

Explanation Packet memory was exhausted to the point that the few static buffers required for transparent bridging cannot be allocated.

Recommended Action Diagnose memory utilization using the **show buffers** and **show memory** commands.

Error Message

%TBRIDGE-4-NOVCDROP: Destination VC unknown for packet, (5 * ONESEC)

Explanation A transparently bridged packet destined for an ATM interface cannot be fully addressed.

Recommended Action Clear the bridge table to force re-learning of all addresses.

Error Message

%TBRIDGE-4-NOVCFLOOD: No VC's configured for bridging on [chars], (5 * ONESEC)

Explanation An ATM interface was configured for transparent bridging without also specifying the associated virtual circuits.

Recommended Action Configure the required virtual circuits on the specified interface.

TCP Error Messages

Transmission Control Protocol error messages

Error Message

```
%TCP-6-BADAUTH: Invalid MD5 digest from [inet]:[dec] to  
[inet]:[dec][chars]
```

Explanation The system received a TCP packet with an invalid MD5 authentication digest on a connection endpoint. The message will end with the string “(RST)” if the incoming packet was a TCP reset packet.

Recommended Action Determine why the source of the packet is not generating correct digests on the connection. This could be due to either misconfiguration or security weaknesses.

Error Message

```
%TCP-6-BADAUTH: No MD5 digest from [inet]:[dec] to  
[inet]:[dec][chars]
```

Explanation The system received a TCP packet without an MD5 authentication digest on a connection endpoint which is expecting one. The message ends with the string “(RST)” if the incoming packet was a TCP reset packet.

Recommended Action Determine why the source of the packet is not generating digests on the connection. This could be due to either misconfiguration or security weaknesses.

Error Message

```
%TCP-2-BUFFER: Tty[t-line], buffering bug  
%TCP-2-PUTBYTE: Tty[t-line], tcp_putbyte() with  
blocking disabled
```

Explanation An internal software error occurred.

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

TMQ Error Message

Error Message

`%TCP-6-NOTREADY, MSG_TRACEBACK, [chars] called but TCP not initialized`

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

`%TCP-6-TOOBIG, MSG_TRACEBACK | MSG_PROCESS, Tty[t-line], too many bytes of options([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.

TMQ Error Message

Inbound terminal port queuing error message

Error Message

`%TMQ-3-NOTFOUND: TMQ, Attempt to delete entry not in queue`

Explanation An attempt was made to delete an entry not in the queue.

Recommended Action Advisory message only. No action required.

TN Error Messages

Telnet error messages

Error Message

%TN-2-BADLOGIN: Bad login string pointer [hex]

%TN-3-BADSTATE: Illegal state [dec]

%TN-3-READLINE: Unknown return code [dec] from telnet_readline()

Explanation An internal software error occurred.

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

TR Error Messages

Token Ring error messages

Error Message

%TR-3-ADPCHK: Interface [chars], 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 message recurs, call your technical support representative for assistance.

Error Message

%TR-3-ASYNCUSE: Unit [dec], [chars], async in use

Explanation Another internal process is communicating with the given Token Ring interface.

Recommended Action Wait 1 minute and try again. If the condition persists, it probably indicates an internal software error. Call your technical support representative for assistance.

Error Message

%TR-4-BADADAPT: Unit [dec], adapter not responding
[hex] [hex][hex] [hex]

Explanation The CSC-R Token Ring interface is not responding to initialization.

Recommended Action Confirm the CSC-R Token Ring card's configuration and make sure it is in the correct slot. The CSC-R card is a Multibus master; it must be part of a contiguous group of bus master cards that includes the CPU. In most configurations the CSC-R Token Ring interface will be the card immediately adjacent to the CPU. If the interface is in the correct slot, this message indicates a probable hardware failure. Call your technical support representative for assistance.

Error Message

%TR-3-BADBRDGPARGS: Unit [dec], bad bridge parameters:
bridge_num=[dec], max_rd= [dec]\nthisring=[dec],
targetring=[dec]

%TR-3-BADBUFSIZE: Unit [dec], bad buffersize = [dec]

%TR-3-BADFIRM: Unit [dec], Tokenring firmware download
failed\n got [hex], expected [hex], at address
[hex].[hex]

%TR-3-BADFIRMTYPE: Unit [dec], bad firmware type code
during [chars]. type=[hex], fw=[hex]

%TR-3-BADFUNC: Unit [dec], bad functional
address=[hex], ring mode=[hex]

Explanation An internal software error occurred.

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

Error Message

%TR-3-BADHEADER: RX - Unit [dec]: type [dec], size [hex], use [hex] flags [hex]

Explanation The system detected corrupted data from the Token Ring interface card (CSC2R/1R and CSC-R16M only). There may be a hardware problem.

Recommended Action Call your technical support representative for assistance.

Error Message

%TR-3-BADMUL: Unit [dec], Can't set TR address to hardware multicast address [enet]

Explanation An attempt was made to set the Token Ring interface MAC address to a reserved multicast address.

Recommended Action Check your configuration. Make sure that your XNS and/or Novell Token Ring addresses have not inadvertently been set to reserved multicast addresses.

Error Message

%TR-3-BADRNNGNUM: Unit [dec], ring number ([dec]) doesn't match established number ([dec])

Explanation The number you have configured for the local ring does not match the value currently in use on the ring.

Recommended Action Check the configuration to make sure you used the correct ring number. If it is correct, confirm the configuration of all other bridges on the ring to make sure they are using the same ring number.

Error Message

`%TR-3-BADSLOT: Unit [dec], Slot [dec] does not exist.`

Explanation This error message pertains only to the Cisco 4000. It is seen when software tries to access (discover) a network interface module (NIM) that is not in slot 1, 2, or 3. The software stalls trying to access the nonexistent slot. This message could indicate a card error.

Recommended Action If this message recurs, call your technical support representative for assistance or a replacement card.

Error Message

`%TR-3-BADSTART: Unit [dec], Start completion and wrong
idb state -state= [dec]`

Explanation An internal software error occurred.

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

Error Message

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

Explanation This error message pertains only to the IGS. When displayed, it indicates that the system cannot find the chipset registers where it expects them to be. This is most likely a hardware error.

Recommended Action If this message recurs, call your technical support representative for assistance. It will be necessary to determine the hardware unit configuration.

Error Message

`%TR-4-BKGND: Unit [dec], bkgnd int: last packet out [dec]ms`

`%TR-4-BKGNDINT: Unit [dec], bkgnd int: [hex][hex]
[hex][hex][hex][hex] [hex][hex]`

Explanation An internal software error occurred.

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

Error Message

%TR-3-BOGUSDATA: [hex] [hex] [hex] [hex] [hex] [hex] [hex] [hex]

Explanation This message displays the first eight bytes of frame data if the data length is invalid. It is the second part of the %TR-3-BOGUSLENGTH error message that follows.

Recommended Action See recommended action for the %TR-3-BOGUSLENGTH error message.

Error Message

%TR-3-BOGUSLENGTH: Unit [dec], bad input length [dec], [chars] code.

Explanation This is the first message displayed when the frame data length is invalid. It is unique to the CSC-R16 Token Ring card for all system versions.

Recommended Action Display of both the %TR-3-BOGUSLENGTH and %TR-3-BOGUSDATA error messages indicates a serious problem on the interface between the Token Ring chipset, the SBE16 card, and the system driver. The engineering developers should be notified. Call your technical support representative for assistance.

Error Message

%TR-3-COMPFAIL: Unit [dec], Tbuf completion failure, result [hex]

%TR-3-FILTFAIL: Unit [dec], SRB filter set failed: [hex] [hex][hex] [hex] (blk 0x[hex]) downing

%TR-3-GETCONF: Unit [dec], get_config failed, result [hex] [hex]

Explanation An internal software error occurred.

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

Error Message

```
%TR-3-DIAGFAIL: Interface [chars] failed init diags [hex] [hex],  
[chars]
```

Explanation The microcode attempted to run its diagnostics on the chip and failed.

Recommended Action Issue a clear interface command. If this message recurs, call your technical support representative for assistance.

Error Message

```
%TR-3-INCOM: Unit [dec], incompatible firmware: system  
[hex], interface [hex]
```

Explanation The Token Ring interface contains firmware that is incompatible with the system software.

Recommended Action Call your technical support representative to upgrade the Token Ring Monitor firmware, the system software, or both.

Error Message

```
%TR-3-INITFAIL: Unit [dec], init failed. result  
code=[hex], error code=[hex]
```

Explanation The Token Ring hardware failed to initialize properly.

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

Error Message

```
%TR-4-INTFAIL: Unit [dec] interface failure: [hex]  
[hex] [hex], idb state [dec]
```

Explanation The Token Ring Monitor firmware detected a fatal error due either to an internal software problem or to a hardware failure.

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

Error Message

`%TR-3-MADGETX: Unit [dec], lost packet using Transmit Descriptor.`

Explanation This error message pertains only to the Cisco 4000. When displayed, it indicates that a packet was lost inside the Madge firmware, and the software lost the pointer to it.

Recommended Action This message indicates a software problem on the card. If this message recurs, call your technical support representative for assistance or a replacement card.

Error Message

`%TR-3-MODEFAIL: Unit [dec], change mode failed. result code=[hex], error code=[hex]`

`%TR-3-MODFAIL: Unit [dec], tra_modify failed, result [hex] [hex]`

`%TR-3-NOFIRM: Unit [dec], no TMS380 firmware present. eagle=[hex], magic=[hex]`

Explanation An internal 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

`%TR-3-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

%TR-4-NOMOREPAGES: Unit [dec], Out of Pages for [chars].

Explanation This error message pertains only to the Cisco 4000. When displayed, it indicates that the ability to switch the receive buffers for the Token Ring was halted due to an insufficient amount of memory.

Recommended Action Reduce other system activity to ease memory demands and then reset the Token Ring interface by entering a **clear interface tokenring** command. If these actions do not solve the problem, upgrade to a larger memory configuration or call your technical support representative for assistance.

Error Message

%TR-3-NOPAK: Unit [dec], Tbuf completion and no pakout

Explanation An internal hardware or software error occurred.

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

Error Message

%TR-3-OLDTRIF: Obsolete firmware in multibus TR unit [dec] - does not support fast switching

Explanation A firmware upgrade is needed.

Recommended Action Call your technical support representative for assistance.

Error Message

%TR-3-OPENFAIL: Unit [dec], open failed: check the lobe cable DB-9 connection

Explanation The Token Ring interface was unable to insert itself into the ring. This is an indication of a busy or broken ring. The first character string in this error message indicates the stage of initialization at which the error occurred, and the second describes the error.

Recommended Action Try to open the interface again. This generally can be accomplished by issuing the **clear interface tokenring** command. If the error message recurs, call your technical support representative for assistance.

Error Message

`%TR-3-OPENFAIL2: Unit [dec], open failed: check the lobe cable connection.`

Explanation The Token Ring interface was unable to insert itself into the ring, and the error code returned indicates a wiring problem.

Recommended Action Check the cable connecting the router to the Token Ring MAU, and try to open the interface again. This generally can be accomplished by issuing the **clear interface tokenring** command. If the error message recurs, call your technical support representative for assistance.

Error Message

`%TR-3-PANIC: Unit [dec], panic [hex] [hex] [hex]`

Explanation The Token Ring monitor firmware detected a fatal error that indicates an impending interface failure.

Recommended Action Copy the error message and the interface message exactly as they appear and then report them to your technical support representative.

Error Message

`%TR-3-PANICINF: Unit [dec], PI [hex] [hex] [hex] [hex] [hex] [hex]`

Explanation This message is similar to the `%TR-3-PANIC` error message, but indicates a nonfatal error. This message appears in very unusual situations that should not arise in normal operation.

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

Error Message

`%TR-3-PANICTYPE: Unit [dec], [chars] error`

Explanation This message is similar to the `%TR-3-PANIC` error message, but indicates a nonfatal error. This message appears in very unusual situations that should not arise in normal operation.

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

Error Message

`%TR-3-RESETFAIL: Unit [dec], reset failed, error code [hex]`

Explanation An internal software error occurred.

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

Error Message

`%TR-3-RESETFAIL2: Unit [dec], reset failed, auxiliary processor init failed`

Explanation This message isolates a particular `RESETFAIL` condition from several other reset failure conditions. It is unique to the CSC-R16 Token Ring card for all system versions and indicates a state problem.

Recommended Action Call your technical support representative for assistance.

Error Message

`%TR-3-RIFBADMAGIC: Invalid magic number ([hex]) in RIF [chars] table entry [hex]`

`%TR-3-RIFTBLTRASH: Trashed [chars] RIF table entry [hex] found and zeroed`

Explanation An internal software error occurred.

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

Error Message

`%TR-3-SETBRIDGEFAIL: Unit [dec], set bridge failed (code %#x)`

Explanation A hardware error occurred. The source routing accelerator (SRA) chip on the Token Ring card could not be initialized.

Recommended Action Call your technical support representative for assistance or a replacement card.

Error Message

`%TR-3-SETFAIL: Unit [dec], couldn't set interface to physical address [enet]`

Explanation An illegal MAC address was specified for this interface.

Recommended Action Normally the Token Ring interface uses the burned-in address contained in a PROM on the board. However, certain protocol stacks require the MAC address to be modified to an illegal value. Check your configuration for possible problems. If this message recurs, call your technical support representative.

Error Message

`%TR-3-SETFUNFAIL: Unit [dec], set functional address failed (code [hex])`

`%TR-3-SETGRPFAIL: Unit [dec], set group address failed (code [hex])`

`%TR-3-SETOPTFAIL: Unit [dec], set open options failed (code [hex])`

`%TR-3-SMTSTATFAIL: Unit [dec], get_smt: get_smt stats failed - result [hex]`

Explanation An internal software error occurred.

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

Error Message

`%TR-4-SNKBRIDG: Unit [dec], removing invalid bridge`

Explanation The system could not start a Token Ring source-route bridge because the interface in question does not have the appropriate Token Ring Monitor firmware or hardware.

Recommended Action Call your technical support representative for assistance.

Error Message

`%TR-3-STARTFAILED: Unit [dec], start failed, result [hex], reason [hex]`

Explanation The Token Ring Monitor firmware attempted to insert the system into the ring, and the chipset detected a nonstandard fatal error.

Recommended Action This message indicates a problem with the Token Ring chipset hardware. Call your technical support representative for assistance.

Error Message

`%TR-3-STARTFAILED2: Unit [dec], start failed, auxiliary processor init failed.`

Explanation This error message isolates a particular STARTFAIL condition from several other reset failure conditions. It is unique to the CSC-R16 Token Ring card for all system versions and indicates a state problem.

Recommended Action Call your technical support representative for assistance.

Error Message

`%TR-6-STATE: TR[dec]: Ring Status: [chars]`

Explanation This message is displayed when the Token Ring's status changed as determined by the chipset. This information also is used to automatically determine whether the interface is still usable to propagate network traffic.

Recommended Action Informational message only. No action required.

Error Message

```
%TR-3-STATFAIL: Unit [dec], get_static: get stats
failed - Async: [hex] [hex] [hex] [hex]
```

Explanation An internal software error occurred.

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

Error Message

```
%TR-6-STATRING: TR[dec]: Ring Status: [chars] [chars] ([hex]) LIV
[hex]
```

Explanation This message is displayed when the Token Ring's status changed as determined by the chipset. This information also is used to automatically determine whether the interface is still usable to propagate network traffic. The meaning of each status code is shown in Table 4.

Recommended Action Check the Ring for the indicated condition.

Table 4 Token Ring Status Codes

Code	Explanation	Fatal
0x8000	Signal loss	Yes
0x4000	Hard error	Yes
0x2000	Soft error	No
0x1000	Transmit beacon	Yes
0x0800	Lobe wire fault	Yes
0x0400	Auto removal error	Yes
0x0100	Receive request removed	Yes
0x0080	Counter overflow	No
0x0040	Single station	No
0x0020	Ring recovery	No

Error Message

```
%TR-3-TRACMD: tra_cmd: unit [dec] bad state: cmd [hex]  
[hex],result [hex] [hex] (blk [hex], iob  
[hex])
```

```
%TR-4-UNKNOWNCOMP: Unit [dec], Unknown command  
completion:cmd [hex], rslt [hex]
```

```
%TR-3-UNKNOWNNT2M: Unit [dec], Unknown t2m command  
[hex] [hex]
```

Explanation An internal software error occurred.

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

Error Message

```
%TR-3-WIREFAULT: Unit [dec], wire fault: check the  
lobe cable MAU connection
```

Explanation The Token Ring hardware is reporting a wire fault condition.

Recommended Action Check the cable connecting the router to the Token Ring media attachment unit (MAU).

TUN Error Messages

Tunnel error messages

Error Message

```
%TUN-4-BADOUTMODE: Interface [chars] unsupported output mode [dec]
[chars]
```

Explanation The tunnel interface was set to an encapsulation mode that is not supported.

Recommended Action Report the problem to your technical support representative and correct your configuration.

Error Message

```
%TUN-4-RECURDOWN: [chars] temporarily disabled due to recursive
routing
```

Explanation When routing the same payload protocol over a carrier protocol (tunneling IP over IP, for example), it is possible to misconfigure your network so that you will try to route to the tunnel destination address via the tunnel. This is usually caused by a misconfiguration of the tunnel or a temporary instability due to route flapping elsewhere in your network. It is important to take steps to ensure that routing information between the carrier networks and the payload networks is not allowed to mix. If the router discovers a recursive routing problem, it will temporarily shut down the tunnel interface for a few minutes so that the situation that is causing this problem can resolve itself as routing protocols converge. If the problem is caused by misconfiguration, the link may oscillate indefinitely.

Recommended Action No action required.

Error Message

`%TUN-4-RECURSHUT: [chars] administratively disabled due to recursive routing`

Explanation If the recursive routing situation reported by the RECURDOWN message is not cleared up after ten bounces, the tunnel interface will be administratively shut down to avoid further flapping.

Recommended Action Determine the cause of the recursive routing situation, correct it, and then manually bring the interface back up using the **no shutdown** command.

UCODE Error Messages

Microcode error messages

Error Message

`%UCODE-3-BADCHKSUM: Bad checksum in [chars], found [hex] expected [hex]`

Explanation The microcode file is corrupted in some way; the checksum computed after reading the file from Flash does not match the one in the file. The file will not be downloaded, and the onboard ROM microcode will be used instead.

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

Error Message

`%UCODE-3-BADHWVER: Ucode file [chars] requires [chars] version [dec].x hardware`

Explanation A mismatch was detected during an attempt to load a microcode file into an interface processor. The hardware requires a different version than the one specified.

Recommended Action Use the required microcode version.

Error Message

`%UCODE-3-HDRCORRUPT: Ucode header corrupted in [chars], found [hex] expected [hex]`

Explanation The microcode file is corrupted in some way; the checksum computed after reading the file from Flash does not match the one in the file. The file will not be downloaded, and the onboard ROM microcode will be used instead.

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

Error Message

`%UCODE-3-IPCBUFFAIL: Unable to obtain IPC resources`

Explanation The InterProcess Communication (IPC) service used to download microcode to certain Interface Processors has failed to obtain a buffer. Certain Interface Processors will not load properly.

Recommended Action Try the reload command again. If this message recurs, call your technical support representative for assistance.

Error Message

`%UCODE-3-IPCINITFAIL: Unable to initialize IPC [chars] services`

Explanation The InterProcess Communication (IPC) service used to download microcode to certain Interface Processors has failed to initialize. Certain Interface Processors will not load properly.

Recommended Action Reload the router.

Error Message

`%UCODE-3-IPCINVALID: Invalid IPC request [dec] received from [hex]`

Explanation The InterProcess Communication (IPC) service used to download microcode to certain Interface Processors has received an invalid message.

Recommended Action Verify that the proper revisions of code are selected.

Error Message

`%UCODE-3-LDFAIL: Unable to download ucode [chars] in slot [dec],
installed ucode loaded`

Explanation For some reason, the microcode file specified by the configuration is not suitable for downloading, or another error occurred. The onboard ROM microcode will be loaded so the interface can remain operational.

Recommended Action Attempt to reload the microcode. If the message recurs, call your technical support representative for assistance.

Error Message

`%UCODE-3-NOBUF: Unable to allocate memory for ucode buffer`

Explanation A buffer is required to decompress microcode before loading it into an interface processor. This buffer could not be allocated for some reason.

Recommended Action Call your technical support representative for assistance.

Error Message

`%UCODE-3-NOFILE: Ucode file [chars] not found, installed ucode
loaded in slot [dec]`

Explanation The file specified by the configuration was not found in Flash. The onboard ROM microcode will be loaded so the interface can remain operational.

Recommended Action Use **show flash** to determine if the file is located in Flash. If the file is there, attempt to reload the microcode. If the message recurs, call your technical support representative for assistance.

Error Message

`%UCODE-3-NOROM: Invalid attempt to load ROM ucode in slot [dec]`

Explanation Some interface processors cannot load microcode from ROM.

Recommended Action Remove the erroneous configuration statement.

Error Message

%UCODE-5-OBSOLETE: FDDI unit [dec] has obsolete microcode: please upgrade it

Explanation This message occurs when an FDDI interface processor is found running microcode that does not support microcode CMT, which is required for all software releases from 10.2 on.

Recommended Action Upgrade the microcode on the interface processor.

Error Message

%UCODE-3-OLDHARD: Ucode file [chars] requires [chars] version [dec].[dec] hardware or later

Explanation The microcode specified requires a more recent version of the hardware than it found. The onboard ROM microcode will be loaded instead.

Recommended Action Call your technical support representative for assistance.

Error Message

%UCODE-3-RDFAIL: Unable to read ucode file [chars] from flash

Explanation For some reason, the microcode file was not read from Flash. Flash might be locked by another process or otherwise unavailable.

Recommended Action Use the **show flash** command to determine whether Flash is in use and issue another **microcode reload** when Flash is free. If the message recurs, call your technical support representative for assistance.

Error Message

%UCODE-3-TOOBIG: File [chars] at length [dec] is too long for buffer size [dec]

Explanation The file is too large for the buffer. The onboard ROM microcode will be loaded.

Recommended Action If the error message recurs after the onboard ROM microcode is loaded, call your technical support representative for assistance.

UTIL Error Messages

Error Message

`%UCODE-3-VERSIONCK: Inappropriate version [dec].[dec] for [chars]`

Explanation An attempt was made to load an inappropriate version of microcode.

Recommended Action Call your technical support representative for assistance.

Error Message

`%UCODE-3-WRONGHARD: [chars] is [chars] ucode not [chars],
microcode/hardware mismatch`

Explanation The specified microcode file is for a different interface processor than specified in the configuration. The user has made a configuration error. The onboard ROM microcode will be loaded.

Recommended Action Reenter your microcode configuration command after confirming the interface type and reload the microcode.

UTIL Error Messages

Utility error messages

Error Message

`%UTIL-3-RANGEINCON, MSG_TRACEBACK, internal inconsistency [dec]
[hex]`

Explanation A fatal software error occurred.

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

Error Message

%UTIL-2-RANGERET: list [hex] no memory, can't return range [dec]
[dec]

Explanation A memory overflow error occurred.

Recommended Action Investigate memory usage. If memory usage is abnormal, call your technical support representative for assistance. Otherwise, increase router memory.

Error Message

%UTIL-2-RANGEDUP: list [hex] already contains range [dec] [dec]

Explanation A software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%UTIL-3-RANGEINVERT: list [hex] low [dec] > high [dec]

Explanation A software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

%UTIL-3-TREE, MSG_TRACEBACK, Data structure error--[chars], ONEMIN

Explanation A software error occurred, resulting in a data structure inconsistency.

Recommended Action Copy the error message exactly as it appears and report it to your technical support representative. Ask for their assistance in obtaining a version of code with the error fixed.

VINES Error Messages

Banyan Virtual Integrated Network Service error messages

Error Message

`%VINES-2-BADPARAM: [chars] called with [chars] parameter set to [chars]`

Explanation One of the VINES lookup functions was called with an illegal argument.

Recommended Action Call your technical support representative for assistance.

Error Message

`%VINES-2-BADTIMER: RTP timer for [chars] was found disabled, and was reset., 10*ONESEC`

Explanation An internal interface timer is not running. This condition usually occurs after an interface reset.

Recommended Action None. The system automatically restarts the timer.

Error Message

`%VINES-2-CACHEFAILED:Cannot build cache entry ([dec] bytes) for [v-name] on [chars]`

Explanation The cache population routing for VINES fast switching determined that the MAC header on a packet is too large to fit into the cache.

Recommended Action Call your technical support representative for assistance.

Error Message

`%VINES-2-CACHEUNSUPP: Caching of [chars] not supported on [chars]`

Explanation The cache population routing for VINES fast switching was called for an interface that does not support VINES fast switching.

Recommended Action Call your technical support representative for assistance.

Error Message

`%VINES-2-CONSISTENCY: Error [chars]`

Explanation The VINES code ran into a situation that should not happen. For example, an IPC port number needs to be allocated, but all 65535 port numbers are currently in use.

Recommended Action Call your technical support representative for assistance.

Error Message

`%VINES-2-CORRUPTENTRY: Detected a corrupted entry in the [chars] table`

Explanation The VINES code detected that an internal table entry was corrupted.

Recommended Action Call your technical support representative for assistance.

Error Message

`%VINES-2-DUPADDR: Duplicate address detected on interface [chars]`

Explanation The router detected that its VINES address is being used by another router.

Recommended Action Identify the other router that is using this address by manual inspection of the routers. Issue the command **vines routing recompute** on both routers. If a router does not support the recompute keyword, then on that router you must disable VINES, write the configuration to memory, reboot the router, and then reconfigure VINES.

Error Message

`%VINES-2-ENCAPFAILED: Encapsulation failed for [v-name] via [v-name] on [chars]`

Explanation The cache population routing for VINES fast switching encountered an encapsulation failure when building a cache entry for a neighbor.

Recommended Action Examine your configuration for causes of the encapsulation failure. Look for missing **map** statements, interfaces that have gone down, and so on.

Error Message

`%VINES-6-FNNOTFOUND: [chars] service [chars] routine missing [chars] vector.`

Explanation There is an inconsistency in the static VINES data structures for handling application-layer packets.

Recommended Action Call your technical support representative for assistance.

Error Message

`%VINES-2-INVALIDPATH: Bad [chars] in path for neighbor entry [v-name]`

Explanation While searching the neighbor table, the code determined that a pointer that should point to a VINES path structure actually points to some other structure.

Recommended Action Call your technical support representative for assistance.

Error Message

`%VINES-2-INVALIDROUTE: Bad [chars] in route for server entry [v-name]`

Explanation While searching the routing table, the code determined that a pointer that should point to a VINES route structure actually points to some other structure.

Recommended Action Call your technical support representative for assistance.

Error Message

`%VINES-6-IPCNOROUTINE: IPC port [dec] registered without an upcall [chars]`

Explanation There is an inconsistency in the active VINES data structure for handling IPC DATA messages. A message was received for a port that should have a listener, but the listener routine cannot be found.

Recommended Action Call your technical support representative for assistance.

Error Message

%VINES-2-NEIGHBOR: vines_update called with null neighbor

Explanation An internal software error occurred.

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

Error Message

%VINES-2-NOBUFFERS: No buffers available for [chars]

Explanation There were no buffers available to send a packet.

Recommended Action Examine your system for memory or buffer leaks.

Error Message

%VINES-2-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.

Error Message

%VINES-2-NOVENCAP: Encapsulation failed on [chars], no vencap routine

Explanation The VINES code tried to send a packet on an interface that does not have a new encapsulation routine.

Recommended Action Call your technical support representative for assistance.

X25 Error Messages

Error Message

%VINES-2-REASSEMBLY, MSG_TRACEBACK, SRTP reassembly code returned invalid result code [dec]., 10*ONESEC

Explanation An internal software occurred.

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

Error Message

%VINES-6-RPCNOSERVICE: IPC port [dec] registered without a service.

Explanation There is an inconsistency in the active VINES data structure for handling Net RPC messages. A message was received for a port that should have a service description, but that service description cannot be found.

Recommended Action Call your technical support representative for assistance.

Error Message

%VINES-6-RTNNOTFOUND: [chars] service [chars] routine not found while [chars].

Explanation There is an inconsistency in the active VINES service description data structures. A service handler routine cannot find the description of its own service.

Recommended Action Call your technical support representative for assistance.

X25 Error Messages

X.25 error messages

Error Message

%X25-3-ADDRESSBAD: Interface [chars], x25 address [chars] subaddress [char] is too long, X25_COMPLAIN_LEVEL

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

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

Error Message

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

Explanation The interface's X.25 configuration is not valid; the existing configuration was not changed.

Recommended Action Verify the following:

- The interface's switched virtual circuit ranges do not overlap; for nonzero values, lic <= hic < ltc <= htc < loc <= hoc. (For more information, refer to "Configuring Virtual Circuit Ranges" in the *Router Products Configuration Guide*.)
- If an incoming-only range is defined, check that it is numerically less than the two-way range.
- If an outgoing-only range is defined, check that it is numerically greater than the two-way range.
- No virtual circuit high/low parameter is zero unless its partner low/high parameter is also zero.
- The default window sizes are less than the interface modulo.

Error Message

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

Explanation This message occurs when a virtual circuit is set up using the default maximum packet sizes, but the DTE and DCE are not configured with the same default values. A packet was received that had the M-bit set, signifying that more data follows, but

the packet did not carry the maximum number of bytes allowed. Such partial data packets must have the M-bit cleared. The resulting loss of a message boundary might cause problems for the data recipient.

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

Error Message

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

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

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

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

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

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

%X25-3-NOTFINDI: Can't find address [inet] to delete

%X25-3-NOTFINDS: Can't find address [chars] to delete

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

Explanation An internal software error occurred.

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

Error Message

%X25-3-COMPERR: Interface [chars] LCI [dec] low-level stack compression error, X25_COMPLAIN_LEVEL

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

Recommended Action Report the error to your technical support representative.

Error Message

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

Explanation The interface's default packet sizes or outgoing packet size facility values are too large to be carried by LAPB.

Recommended Action The router will negotiate lower packet size values automatically. The LAPB N1 value should be increased. For example, for an X.25 maximum packet size of 1024, modulo 8 X.25 operation will add 3 bytes of overhead and modulo 8 LAPB operation will add 4 bytes of overhead (the two bytes of CRC are defined to be included). This means that N1 must be at least $1031 \text{ bytes} * 8 = 8248$.

Error Message

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

Explanation An internal software error occurred.

Recommended Action Call your technical support representative for assistance.

Error Message

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

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

Recommended Action If this message occurs frequently, you may need to modify the buffer pool. Call your technical support representative for assistance.

Error Message

%X25-5-NOMEM: Interface [chars] LCI [dec] NO memory for dictionary

Explanation The 14K PBP history dictionaries could not be allocated. PBP compression is not enabled.

Recommended Action Call your technical support representative for assistance.

Error Message

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

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

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

Error Message

%X25-5-PBPDBIT: Interface [chars] LCI [dec] PBP Compression does not support X25 D bit, X25_COMPLAIN_LEVEL

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

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

Error Message

%X25-5-PBPHOLDQ: Interface [chars] LCI [dec] X25 Hold queue needs to be at least default size, X25_COMPLAIN_LEVEL

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

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

Error Message

%X25-5-PBPNOEND: Interface [chars] LCI [dec] End system not configed for X25 PBP, X25_COMPLAIN_LEVEL

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

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

Error Message

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

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

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

Error Message

%X25-3-PVCDELETE: LCI for PVC [dec] being deleted!

Explanation A PVC was using an **x25 map** entry that was deleted or the interface configuration changed to make the PVC number illegal; this forces the deletion of the PVC.

Recommended Action No action required. Note that some attached equipment may object to an inability to use the deleted PVC.

Error Message

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

Explanation An outgoing-only or incoming-only virtual circuit range exactly overlaps the two-way virtual circuit range. This was the former method for specifying that a virtual circuit range was not used. The current method is to set the range limits to zero.

Recommended Action Use the privileged **write memory** command to write the configuration to memory. This will store the modified (zero) range limits.

Error Message

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

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

Recommended Action Contact your technical support representative for assistance.

Error Message

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

Explanation An internal software error occurred. The PBP header has a sync field. The sync field (8 bits) is checked on each received packet.

Recommended Action Contact your technical support representative for assistance.

Error Message

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

Explanation An X.25 circuit that is being tunneled over a TCP connection between routers was cleared ungracefully. The last [chars] text string in the message can take one of two forms. If the text string is “closed unexpectedly,” the router at the remote end of the

connection was rebooted, or the connection failed. If the text string is “connection corrupted,” it is likely that the connection was made to a router running an older software release.

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

Error Message

```
%X25-3-VERSIONBAD: Interface [chars] LCI [dec] Compression Version  
mismatch. Expected [hex]; received [hex]
```

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

Recommended Action Call your technical support representative for assistance.

Error Message

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

Explanation A protocol error was detected over an X.25-over-TCP (XOT) connection, causing the connected VC to close. A flaw may exist in the remote host’s XOT implementation.

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

XNS Error Messages

Xerox Network Services error messages

Error Message

%XNS-3-BADPATHS: Invalid number of paths ([dec]) for [dec]

%XNS-2-BADROUTE: Error [chars] route - null table

Explanation An internal software error occurred.

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