

# System Error Messages

## ALIGN Error Messages

This facility controls a feature in the RISC-processor-based Cisco products which 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 has been identified as needing 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 has 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 has 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 has been 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 has been 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.

---

## ARAP Error Messages

Apple Remote Access Protocol error messages

**Error Message**

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

**Explanation** This message will only appear when “arap logging” has been 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” has been configured. The message notes that an ARAP user has logged in.

**Recommended Action** No action is required.

---

**Error Message**

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

**Explanation** A user has been disconnected from ARAP at an unexpected time. This may be due to modems dropping, server error, client problems, or anynumber 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 have become 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 was unable to 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 mac and the ARAP server has fallen out of order. If this is sporadic, it is indicative of 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 has failed because extended tacacs has not been configured.

**Recommended Action** Configure extended TACACS.

---

**Error Message**

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

**Explanation** ARAP has failed to run because it couldn't allocate enough memory for its internal data structures.

**Recommended Action** Examine "show mem" details of memory usage. Possibly install more memory.

---

**Error Message**

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

**Explanation** A corrupted packet has reached the ARAP code.

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

---

## 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 has been detected.

**Recommended Action** Informational message only. No action required.

---

AT Error Messages

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**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 may 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 has not heard about a route within the required time-out period. Therefore, the route has been marked as bad. This may 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.

---

**AT Error Messages**



**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 are experiencing. 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 has 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, a route has been learned that has multiple zone names defined. This condition can cause inconsistencies for nodes in your internetwork.

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

---

**Error Message**

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

**Explanation** Although this router has neighbors that require your internetwork to observe compatibility rules, a route has been learned 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 has 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-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 are experiencing 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 has 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 has occurred.

**Recommended Action** Call your technical support representative for assistance.

---

**Error Message**

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

**Explanation** Another AppleTalk node on a common network interface has claimed the same AppleTalk address that this router was using. This error indicates a serious, unexpected problem. If this is a recurring problem, there may be a physical network problem in which the nodes are unable to hear each other.

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

---

**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 has been disabled because of a bad serial line, a configuration command, or a bad interface.

**Recommended Action** If the port has not been intentionally disabled, this message may 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 has 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 has been restarted.

**Recommended Action** Informational message only. No action required.

---

**Error Message**

%AT-3-INVNBPCMD: Invalid NBPTtest command `[chars]`

**Explanation** An unrecognized command was given in the NBPTtest facility.

**Recommended Action** Enter a valid command.

---

**Error Message**

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

**Explanation** A peer router has become 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 has 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 has 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 has 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 has 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 has been 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-NOROUTE: 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 has 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-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 has occurred.

**Recommended Action** Call your technical support representative for assistance.

---

**Error Message**

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

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

**Recommended Action** Informational message only. No action required.

---



**Error Message**

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

**Explanation** The path to a network has 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 has 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 has gone 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 has 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 has gone 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 has been 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 has changed.

**Recommended Action** Informational message only. No action required.

---

**Error Message**

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

**Explanation** An internal error has 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 has purged an unused zone from the zone table.

**Recommended Action** Informational message only. No action required.

---

### Error Message

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

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

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

---

## BGP Error Message

Border Gateway Protocol error messages

**Error Message**

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

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

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

---

**Error Message**

```
%BGP-3-RADIXINIT: Radix tree initialization failed
```

**Explanation** Initialization of 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 has 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]

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

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

---

**Error Message**

%BRI-3-ODDSTART: Interface [chars]

**Explanation** An internal software error has 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 has occurred.

**Recommended Action** Call your technical support representative for assistance.

---

**BRI Error Messages**

---

**Error Message**

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

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

**Recommended Action** Repair or replace the malfunctioning controller.

---

## 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 has 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 has occurred.

**Recommended Action** Call your technical support representative for  
assistance.

---

**Error Message**

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

**Explanation** An internal software error has 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 has 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 has occurred.

**Recommended Action** Call your technical support representative for assistance.

---

**Error Message**

%CBUS-3-CIPRESET: Interface [chars], Error [hex] [chars] - cip\_reset()

**Explanation** A hardware or software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

---

**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 has 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])

%CBUS-3-CTRCMDFAILED2: Unit [dec], CTR Command [hex]  
Failed, Code [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-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-CTRLRINITERR: Controller [dec], Error [hex],  
cdb [hex] [chars] - cbus\_init()

**Explanation** A hardware or software error has 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-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) has not responded 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 has 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()

%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-4-NOCOKIE: [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. Check that all cards are properly seated. If conditions warrant, upgrade to a larger memory configuration.

---

**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-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-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.

---

## 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, the all CIP error codes are listed in the “CIP Error Messages” section by facility subcode, and organized alphabetically by mnemonic. CIP and slot number are not shown in the error message listing.

## CIP-ADAPTER Error Messages

System error messages for the adapter task

### Error Message

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

**Explanation** The user has used the test cbus command to request a particular adapter diagnostic to be run. This message is to inform the user that the diagnostic routine has 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 has 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 has 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 has 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 has 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 has 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** Reenter 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** This indicates that an error has occurred on the adapter. The information displayed will assist development in determining 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 displaying logout information. Its purpose is 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 scan 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 is run. 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.

---



## 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 has occurred. This is a fatal internal logic error.

**Recommended Action** Report this message 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 has generated an unexpected message.

**Recommended Action** Normal processing will resume, but it would be useful for development to know that this message has 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** The user has 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 development 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 has recovered but development needs 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 has recovered but development needs 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 has recovered but development needs 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 has performed recovery, but development 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 has performed recovery, but development 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 has performed recovery, but development 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 has requested the CIP to perform reset processing for an undefined path. This is an internal logic error.

**Recommended Action** The CIP has performed recovery, but development 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 has 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 has performed recovery, but development 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 has requested the CIP to reset an undefined logical path. This is an internal logic error.

**Recommended Action** The CIP has performed recovery, but development 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 has performed recovery, but development 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 has requested the CIP to perform a selective reset on an undefined logical path. This is an internal logic error.

**Recommended Action** The CIP has performed recovery, but development 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 has presented the CIP with notification 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 has performed recovery, but development 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 the CIP to 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 has performed recovery, but development 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 was not able to write the common communication area. This is a fatal internal logic error.

**Recommended Action** Report this message 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-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-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.

---

## 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 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-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.

---

**Error Message**

`%INT-0-REMOVE TRAP: 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-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-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.

---

**CIP-SCB Error Message**

---

**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.

---

## 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 has 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-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-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 has occurred.

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

---

## COMP Error Messages

Point-to-point compression error messages

### Error Message

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

**Explanation** An internal software error has 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-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 has stopped responding to commands over the cBus, so it has been 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-3-REMLOOP: Controller [chars], remote loop [chars] [chars]`

**Explanation** A configurable controller has entered remote loopback.

**Recommended Action** No action required.

---

**Error Message**

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

**Explanation** A configurable controller has changed its state.

**Recommended Action** No action required.

---

## CSC2-4 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

**CSC2-4 Error Message**



**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-CXBUSERR: Slot [dec], CxBus Error

**Explanation** A processor has 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 has 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 has 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** Either you have 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-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-WCSCCTRLRERR: 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

has 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 has 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 has 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.

---

## 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.

---

## DUAL Error Messages

Enhanced Interior Gateway Protocol error messages

**Error Message**

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

**Explanation** A hardware or software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

---

## DUAL Error Messages

**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-NOHANDLE: Handle [dec] is not allocated in pool.

**Explanation** A hardware or software error has 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 has 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 has 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 has 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 has 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-1-SHUTDOWN: Environmental Monitor initiated  
shutdown
```

**Explanation** The system has 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 has not been 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 has reached a warning or critical level and is approaching or has 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 has 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.

---

## 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 has 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 has 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 has 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 has occurred.

**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 has occurred.

**Recommended Action** Call your technical support representative for assistance.

---

FDDISTAT Error Message

---

## 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 has changed.

**Recommended Action** Notification message only. No action required.

---

## GRIP Error Messages

XNS Routing Protocol error messages

### Error Message

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

**Explanation** An internal inconsistency has been 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 has occurred.

**Recommended Action** Call your technical support representative for assistance.

---

## HD Error Messages

HD64570 serial controller error messages

### Error Message

```
%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 has occurred.

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

---

### Error Message

```
%HD-1-BADPORT: [chars]
```

**Explanation** A hardware or software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

---

### Error Message

```
%HD-1-BADPORTADAPTER: [chars]
```

**Explanation** A hardware or software error has 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 has been 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-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 has 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 has occurred.

**Recommended Action** Repair or replace the controller.

---

## 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.

---

### IGRP Error Message

## 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 has 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 has 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.

---

## IPRT Error Messages

Internet Protocol routing error messages

**Error Message**

%IPRT-2-COMPRESS: Bad route\_compress() call, sdb=  
[hex]

**Explanation** An internal software error has 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-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-BADIGRPSAP: Cannot send incremental SAP update  
to peer on interface [chars]. Increase buffers or  
increase output-sap-delay.`

**Explanation** A hardware or software error has 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 has been 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 has been 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 has 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

STS-10X or IGS 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-BAENCAP: Unit [dec], bad encapsulation in  
idbenctype = [hex]`

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

**Explanation** An internal software error has 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.

---

**Error Message**

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

**Explanation** An Ethernet interface is malfunctioning, or an internal software error has 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 Ethernet hardware is requesting data faster than the system can supply it. It might indicate that the system is at the limit of its performance.

**Recommended Action** A small number of underflows may not be a cause for concern. You can monitor underflows with the show interface command. Reducing the load on the router or installing a higher performance router should alleviate this problem.

---

## 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 has detected a conflict in assigned ring numbers for the specified Token Ring. The Ring Parameter Server (RPS) function has been 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 has 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 has been 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 has 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

### 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 has 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 has 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 has occurred.

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

---

**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 has changed state.

**Recommended Action** Notification message only. No action required.

---

## LINK Error Messages

Data Link error messages

### Error Message

```
%LINK-3-BAENCAP: 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-BAETHER: Interface [chars], Bad ethernet  
encap code
```

**Explanation** An internal software error has 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 has 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 has 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 has 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 has changed state.

**Recommended Action** Notification message only. No action required.

---

**Error Message**

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

**Explanation** There has been 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 has occurred.

**Recommended Action** Call your technical support representative for assistance.

---

**Error Message**

%LINK-2-NOSOURCE: Source idb not set

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

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

**Explanation** An internal software error has occurred.

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

---

**Error Message**

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

**Explanation** The Reverse Address Resolution Protocol (RARP) has 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) has 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 has gone either up or down.

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

---

## MAILBOX Error Messages

ChipCom Mailbox error messages

### 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.

---

## MCI Error Messages

Multiprot 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-NOCOKIE: 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.

---

## MK5025 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 has occurred.

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

---

MK5025 Error Messages

---



**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 has been 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 has 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 has occurred.

**Recommended Action** Repair or replace the controller.

---

**Error Message**

%MK5-3-PLOSTERR: 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.

---

## 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 has occurred.

**Recommended Action** Call your technical support representative for  
assistance.

---

## 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 has detected a newly inserted processor in slot [n]. 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-6-REMCARD: Card removed from slot [dec],  
interfaces disabled
```

**Explanation** The OIR facility has 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 has 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 has 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\_LSaid: Found lsa type [dec] in LSA [inet], [inet] from [inet], [chars]

**Explanation** An internal software error has 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 has been 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 has 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 has been 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 which 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 has 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 has 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 has occurred.

**Recommended Action** Call your technical support representative for assistance.

---

**Error Message**

```
%OSPF-3-UNKNOWNSTATE: Reached unknown state in  
neighbor state machine
```

**Explanation** An internal software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

---

## 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 has 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-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 has failed an internal software check.

**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.

---

## 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** Check 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.

---

**Error Message**

%PPP-4-NOEXTTACACS: PPP TACACS is configured but extended TACACS is not.

**Explanation** PPP was configured to use TACACS, but “extended TACACS” has not been configured or has been 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.

---

## 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 has 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-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 has been 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-LNXNOTFOUND: lnx\_remove\_macaddr\_hash did not find target lnx

**Explanation** The **qllc srb** command was not defined for this interface.

**Recommended Action** Add a valid **qllc 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 **qllc 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 has been defined for this interface.

**Recommended Action** Define the virtual MAC address, using either the **x25 map qllc** or the **x25 pvc qllc** command.

---

**QLLC Error Messages**

---

**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 qlc 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 qlc session; current statue is [chars]

**Explanation** A QLLC session could not be established.

**Recommended Action** Verify that the **qlc partner** and the **qlc xid** commands are correct.

---

**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 has not been configured.

**Recommended Action** Check the configuration commands for the structure.

---

## 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 resource 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 has occurred.

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

---

## REMIF Error Messages

Remote interface error messages

REGEXP Error Message

---

**Error Message**

%REMIF-3-BADCMD: [dec] from [inet]

**Explanation** An internal software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

---

**Error Message**

%REMIF-3-CLOSED: [chars] has released [chars]

**Explanation** An internal software error has 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 has 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 has occurred.

**Recommended Action** Call your technical support representative for assistance.

---

**Error Message**

%REMIF-3-IQUEUE: Input on [chars]

**Explanation** An internal software error has 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 has occurred.

**Recommended Action** Call your technical support representative for assistance.

---

**Error Message**

%REMIF-3-OPEN: [chars] now owns [chars]

**Explanation** An internal software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

---

**Error Message**

%REMIF-3-OQUEUE: Output on [chars]

**Explanation** An internal software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

---



**Error Message**

`%REMIF-3-TCPERR: TCP error, status [dec]`

**Explanation** An internal software error has 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.

---

**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 has occurred.

**Recommended Action** If either of these messages recur, 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 has 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 has 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 has 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 has 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 has 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 has occurred.

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

---

### **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 has 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-N1TOOBIG: Interface [chars], N1 too large

**Explanation** An information frame was received from the other end of the SDLC link that was larger than allowed with the N1 parameter on this link.

**Recommended Action** Either increase the value of the N1 parameter for this interface on the router or reduce the size of the maximum information frame sent by the other end of the link.

---



**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-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 has not been 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 has been 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 has been 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 has been 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

IP security error messages

### 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 has occurred.

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

---

### 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 Link IP error messages

### Error Message

`%SLIP-2-BADQUOTE: Impossible quoted character [hex]`

`%SLIP-2-BADSTATE: Impossible input state [hex]`

**Explanation** An internal software error has occurred.

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

---

## 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 has 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 has 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 has 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-MEMERROR: SSE memory failure, address [hex]  
expected [hex], got [hex]`

**Explanation** A hardware error has 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 has 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 has 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-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 has 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 has 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 has 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 has 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 has 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 has 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 has occurred.

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

---

**Error Message**

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

**Explanation** A remote peer has 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 has 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 has 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 has 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-BADFREENPTRS: 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 has 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 has 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.

---

**SYS Error Messages**

**Error Message**

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

**Explanation** A software error has occurred.

**Recommended Action** Call your technical support representative for  
assistance.

---

**Error Message**

%SYS-3-BADRESID: Clock hardware returned bad residual  
[dec]

**Explanation** A software error has 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 has occurred.

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

---

**Error Message**

%SYS-2-BLOCKHUMG: Task hung with blocking disabled, value = [hex]

**Explanation** A software error has 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 has 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 has been changed.

**Recommended Action** Notification messages only. No action required.

---

**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 has 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 has occurred.

**Recommended Action** Call your technical support representative for assistance.

---

**Error Message**

%SYS-2-DUPEXPORT: 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 has 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 has 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-MSGLOST: [dec] messages lost due to queue  
overflow

**Explanation** A software error has 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 has 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 %e

**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 has 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 has 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 has occurred.

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

---

**SYS Error Messages**

---

**Error Message**

```
%SYS-1-OVERTEMP: System detected OVER TEMPERATURE  
condition.  
Please resolve cooling problem immediately!
```

**Explanation** The environmental monitor has 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 has 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 has 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 has been 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 has occurred.

**Recommended Action** Call your technical support representative for assistance.

---



**Error Message**

%SYS-2-RETFBUF: Bad retbuffer, ptr= [hex]

%SYS-2-RETFBUF1: 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 has occurred.

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

---

**Error Message**

%SYS-3-SUPNONE: Registry [dec] doesn't exist

**Explanation** A software error has 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 has become corrupted.

**Recommended Action** Call your technical support representative for assistance.

---

**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-3-WRONGFREELIST: Block [hex], size [dec], on wrong free list ([dec], [dec])

**Explanation** A freed buffer has been 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 has occurred.

**Recommended Action** Call your technical support representative for assistance.

---

## 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 has been lost. This may interfere with accounting or auditing on the server.

This condition arises when the TACACS server is misconfigured, has crashed, or has become 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.

---

## TCP Error Messages

Transmission Control Protocol error messages

### 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 has occurred.

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

---

## TMQ Error Messages

Inbound Terminal Port Queuing error messages

### 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 has occurred.

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

---

## TR Error Messages

Token Ring error messages

### 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** Check 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-BADBUFFSIZE: 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 has 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 has 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-BADRNUNUM: 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, check 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 has 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 check the hardware unit configuration.

---

**Error Message**

%TR-4-BKGNND: Unit [dec], bkgnd int: last packet out  
[dec]ms

%TR-4-BKGNNDINT: Unit [dec], bkgnd int: [hex][hex]  
[hex][hex][hex][hex] [hex][hex]

**Explanation** An internal software error has 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 has occurred.

**Recommended Action** If any of these messages recur, 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 has 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 has 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 has 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 has been 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 has 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 has 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 has 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 has 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 has 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-SETGRPFALL: 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 has 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 has 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 has 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 has 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

**TR Error Messages**

**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 has 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 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-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-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 has 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-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-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 has been loaded, 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-2-RANGERET: list [hex] no memory, can't return range [dec] [dec]`

**Explanation** A memory overflow error has 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 has 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 has occurred.

**Recommended Action** Call your technical support representative for assistance.

---

## 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-CACHEFAILED:Cannot build cache entry ([dec]  
bytes) for [v-name] on [chars]`

**Explanation** The cache population routing for VINES fast switching has 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 has been 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 has run 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 has detected that an internal table entry has become corrupted.

**Recommended Action** Call your technical support representative for assistance.

---

**Error Message**

`%VINES-2-DUPADDR: Duplicate address detected on  
interface [chars]`

**Explanation** The router has 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 has 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-NOENCAP: 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.

---

**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-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,  $lic \leq hic < ltc \leq htc < loc \leq hoc$ . (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-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 has occurred.

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

---

**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 bytes \* 8 = 8248.

---

**Error Message**

%X25-3-LCIBOGUS: in x25\_timer NULL lci-idb [hex]

**Explanation** An internal software error has 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**

%X25-3-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 has 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 has 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 has been rebooted, or the connection has 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 has occurred. The PBP header has Version field. the version is checked on each received packet.

**Recommended Action** 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 has occurred.

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

---

## Miscellaneous Error Messages

This section covers other types of error messages that you may encounter, such as bus, parity, timeout, unexpected, and unknown error messages.

These error messages result when the system image crashes, either from a hardware or a software failure. To access these messages, use the bootstrap program as described in the section “System Bootstrap Diagnostics” in either the *AGS+ Hardware Installation and Maintenance* or the *ASM-CS Hardware Installation and Maintenance* publications.

When you encounter a timeout, bus error, or unknown error message, you must run the **k** stack trace command at the bootstrap mode prompt (>).

In the following example, a timeout error message appears, the **k** stack trace command is run, but no stack trace results.

```
Timeout (control reg=0xCF10) Error, address: 0xFFFFFFFF8 \
at 0x317D49E (PC)
>k
No stack to dump (NULL frame pointer)
```

In the following example an unknown error message appears, the **k** stack trace command is run, and a stack trace results.

```
Unknown (control reg=0x10) Error, address: 0xD0D0D0D at
0x313DC22 (PC)
>k
Current PC: 0x313DC22
FP: 0xE6620 RA: 0x31411A8
FP: 0xE6634 RA: 0x3123D1C
FP: 0xE6650 RA: 0x312303A
FP: 0xE6668 RA: 0x3133664
FP: 0xE667C RA: 0x31337D2
FP: 0xE6694 RA: 0x31349DA
FP: 0xE66A0 RA: 0x3014B4C
```



Table 5 describes the fields in this sample stack trace.

**Table 5 Stack Trace Fields**

Field	Description
Current PC: 0x313DC22	Address at which the failure occurred. This address is also called the program counter (PC).
FP: 0xE6620	Stack frame pointer.
RA: 0x31411A8	Program counter of calling function saved in stack frame. This value is used to trace the flow of software function calls leading to the failure.

After you obtain the stack trace, use the **i** (initialize) command before you manually boot up the system image. Then use the **show version** command (when possible) to identify the software release and version number for use by technical staff.

On systems that have a hardware or a virtual (software) configuration register, and the boot bits (lowest four bits) are set to a value greater than 0, the system will repeatedly try to boot up the appropriate system image from resident ROMs, Flash memory, or a server over the network. If the booting is successful, the system prompt appears. You then can use the **show stack** command to obtain the stack trace.

In cases where the router crashes repeatedly, send a Break character from the console keyboard to obtain the bootstrap mode prompt. Then modify the configuration register boot bits to zero, enter the **i** (initialize) command, and manually attempt to bootstrap the system image. If it crashes, use the **k** stack trace command.

### Error Message

```
Bus Error control register: [hex]
non-local memory transaction timeout
Bus Error, address: [hex] at [hex] (PC)
```

**Explanation** An invalid memory address is accessed, either because of a software bug or because a boot of an incompatible software image was attempted.

**Recommended Action** If the error occurred when your tried to boot up a system image over the network or from reprogrammed Flash memory, a probable reason could be the use of a wrong or incompatible system image. Look in the appropriate documentation to find out which system image to use. If you still need assistance, contact your technical support representative with the following details:

- Name of the system image file used for booting (as obtained from the technical support representative)
- Product name and configuration
- **show version** output from any bootable ROM-based image available on the system (a bootstrap image, for example)

If the error occurred while trying to boot up a built-in ROM-based image, contact your technical support representative with the following details:

- Product name and configuration
- Any hardware/software upgrades that were made prior to the failure
- Anything else that you think will help your technical support representative diagnose the problem
- Any stack trace, if obtainable, using the **k** command at the bootstrap prompt (<)

If the error occurred while the system was operational, contact your technical support representative after gathering the following information:

- Any stack trace obtained using the **k** command at the bootstrap mode prompt (>); or if the system successfully rebooted itself, **show stack** output
  - **show version** output obtained after rebooting the system image in which the failure occurred
- 

### Error Message

```
Bus Error control register: [hex]
ram byte ([value]) parity error
Bus Error, address: [hex] at [hex] (PC)
```

**Explanation** Memory corruption or failure has occurred, most likely because of a hardware problem or by disturbances such as power line problems.

**Recommended Action** Reboot the system and observe whether the problem recurs. Also ensure that the power line has appropriate protection equipment. If the problem is a one-time occurrence, the cause could be a power line disturbance.

---

### Error Message

```
Bus Error control register: [hex]
system overtemp
Bus Error, address: [hex] at [hex] (PC)
```

**Explanation** Temperature exceeded the operating range, most likely because of a ventilation, air-conditioning, or hardware problem.

**Recommended Action** Power off the system and give it time to cool. Check room ventilation and air conditioning. Also ensure that system air-flow grids are not blocked and that blowers are operational. Call your technical support representative if a blower needs replacement.

---

**Error Message**

Local Timeout (control reg=[hex]) Error, address:  
[hex] at [hex] (PC)

**Explanation** An invalid memory address is accessed, either because of a software bug or because a boot of an incompatible software image was attempted.

**Recommended Action** Refer to the Recommended Action for the first “Bus Error control register” message in this section.

---

**Error Message**

Multibus Timeout (control reg=[hex]) Error, address:  
[hex] at [hex] (PC)

**Explanation** An invalid memory address is accessed, either because of a software bug or because of incompatible microcode in a multibus card.

**Recommended Action** Reseat the card. If this message recurs, call your technical support representative for assistance.

---

**Error Message**

Parity (control reg=[hex]) Error, address: [hex] at  
[hex] (PC)

**Explanation** Memory corruption or failure has occurred, most likely because of a hardware problem. Disturbances such as power line problems are also possibilities.

**Recommended Action** Reboot the system and observe whether the problem recurs. Also ensure that the power line has appropriate protection equipment. If the problem is a one-time occurrence, the cause could be a power line disturbance.

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

---

**Error Message**

```
Shared Memory Parity Error  
shared memory control register = [hex]  
error caused by slot [dec] access in byte(s) [dec]
```

```
Shared Memory Parity Error  
shared memory control register = [hex]  
error caused by MPU access in byte(s) [dec]
```

**Explanation** Shared (I/O) memory failure or corruption occurred during access by the processor. This problem is most likely due to a hardware failure or by disturbances such as power line problems.

**Recommended Action** Reboot the system and observe whether the problem recurs. Also ensure that the power line has appropriate protection equipment. If the problem is a one-time occurrence, the cause could be a power line disturbance.

---

**Error Message**

```
Unexpected exception to CPU vector [dec], PC = [hex]
```

**Explanation** Either a hardware or a software problem has occurred.

**Recommended Action** Refer to the Recommended Action for the first “Bus Error control register” message in this section.

---

**Error Message**

```
Unexpected vectored interrupt (vector offset [dec])
```

**Explanation** Either a hardware or a software problem has occurred.

**Recommended Action** Refer to the Recommended Action for the first “Bus Error control register” message in this section.

---

**Error Message**

Unknown (control reg=[hex]) Error, address: [hex] at  
[hex] (PC)

**Explanation** Either a hardware or a software problem has occurred.

**Recommended Action** Refer to the Recommended Action for the first  
“Bus Error control register” message in this section.

---