

## ***System Error Messages***

### ***Introduction***

This publication lists and describes system error messages, as of Software Release 9.0, for the router, terminal server, and protocol translator products. These are the error messages which the system software sends to the console (and, optionally, to a logging server on another system) during operation.

Not all of these messages indicate problems with your system. Some are purely informational, while others may help to diagnose problems with communications lines, internal hardware, or the system software.

### ***How to Read the Error Messages***

The messages begin with a percent sign, and are displayed in the following format:

```
%PPP-6-LOOPED: The line appears to be looped back
```

The messages are structured as follows:

```
%FACILITY-SEVERITY-MNEMONIC: Message-text
```

**FACILITY** is a code, consisting of two to five uppercase letters, indicating the facility to which the message refers. A facility may be a hardware device, a protocol, or a module of the system software. Table 1, "Facility Codes," lists the codes for all of the system facilities.

**SEVERITY** is a single-digit code from 0 to 7 which reflects the severity of the condition. The lower the number, the more serious the situation. Table 2, "Error Message Logging Priorities," lists the severity levels.

**MNEMONIC** is a code, consisting of uppercase letters, that uniquely identifies the message.

**Message-text** is a text string describing the condition. This portion of the message sometimes contains detailed information about the event being reported, including terminal port numbers, network addresses, or addresses that correspond to locations in the system's memory address space. Because the information in these variable fields changes from message to message, it is represented here by short strings enclosed in square brackets ([ ]). A decimal number, for example, is represented as [dec]. A complete

list of the types of variable fields, and the information contained in them, appears in Table 3, "Representation of Variable Fields in Error Messages."

If one or more error messages recur after you take the recommended action, contact Cisco or contact your local field service organization.

***Note:** Each section of this publication describes the error messages produced by a different system facility. Messages are listed alphabetically by mnemonic. If several error messages share the same explanation and recommended action, the messages are presented as a group followed by the common explanation and recommended action. A quick index is also provided at the end of this publication to help you find the messages quickly.*

Use the following tables to interpret the facility codes that begin each message, the severity level numbers associated with each message, and the variable fields contained in some of the messages.

**Table 1: Facility Codes**

<b>Code</b>	<b>Facility</b>
AT	AppleTalk
BGP	Border Gateway Protocol
CBUS	The cBus controller
CHAOS	CHAOSnet
CLNS	OSI Connectionless Network Services
CSC2	CSC2/CSC3 CPU cards
DNET	DECnet
EGP	Exterior Gateway Protocol
HELLO	HELLO Protocol
IGRP	Interior Gateway Routing Protocol
IMP	Interface Message Processor
IP	Internet Protocol
IPRT	IP Routing
LANCE	STS-10X or IGS Ethernet Interface
LANMGR	IBM LAN Network Manager
LAPB	X.25 Link Access Protocol
LAT	DEC LAT (Local Area Transport)
LINK	Data Link
MAILBOX	ChipCom Mailbox Support
MCI	Multiport Communications Interface
MK5	MK5025 serial controller
PAD	X.25 Packet Assembler/Disassembler

Code	Facility
PPP	Point-to-Point Protocol
PR	Parallel Printer devices
PUP	Xerox PARC Universal Packet protocol
REGEXP	Regular expression parser
RIP	BSD IP Routing Information Protocol
RSRB	Remote Source Routing Bridge
SBE	SBE serial interface
SDLC	Synchronous Data Link Control
SEC	IP Security
SLIP	Serial Link IP
STUN	Serial Tunneling
SYS	Operating system
TAC	Terminal Access Control protocol
TCP	Transmission Control Protocol
TMQ	Inbound Terminal Port Queuing
TN	Telnet
TR	Token Ring
VINES	Banyan VINES
X25	X.25
XNS	Xerox Network Services

**Table 2: Error Message Logging Priorities**

Level	Description
0 – emergencies	System unusable
1 – alerts	Immediate action needed
2 – critical	Critical conditions
3 – errors	Error conditions
4 – warnings	Warning conditions
5 – notification	Normal but significant condition
6 – informational	Informational messages only
7 – debugging	Appears during debugging only.

The levels correspond to the keywords assigned by the **logging** global configuration commands, to define where and at what level these messages will appear. The default is to log messages to the console at the warnings level (4). See the system configuration chapter and descriptions

of the **logging** command in the publication for your networking product for more information.

**Table 3: Representation of Variable Fields in Error Messages**

Representation	Type of Information
[dec]	Decimal number
[hex]	Hexadecimal number
[char]	Single character
[chars]	Character string
[node]	Address or node name
[atalk_address]	AppleTalk address
[atalk_net]	AppleTalk network, either 600 or 600-601
[enet]	Ethernet address (for example, 0000.DEAD.00C0)
[inet]	Internet address (for example, 12.128.2.16)
[t-line]	Terminal line number in octal (or decimal if the decimal-tty service is enabled)

### ***Error Message Traceback Reports***

There are some messages displayed that describe internal errors and contain traceback information. This information is very important and should be included when you report a problem to Cisco Systems.

The following sample message includes traceback information.

```
-Process= "Exec", level= 0, pid= 17  
-Traceback= 1A82 1AB4 6378 A072 1054 1860
```

## *AppleTalk Error Messages*

---

### **Error Message:**

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

### **Explanation:**

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

### **Recommended Action:**

Advisory message only. No action required.

---

### **Error Message:**

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

### **Explanation:**

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

### **Recommended Action:**

Advisory 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:**

None; the hint is ignored and a random valid hint has 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 the AppleTalk address that will be used.

**Recommended Action:**

Advisory message only. No action required.

---

**Error Message:**

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

**Explanation:**

An inconsistency was detected by the software. Although considered a serious error, the router attempts to continue but AppleTalk processing may be impaired.

**Recommended Action:**

Record the entire message and note any AppleTalk problems that you are experiencing. This information should be provided in a problem report to Cisco Systems.

---

**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 can be due to the neighbor's network range not matching this router's network range.

**Recommended Action:**

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

---

**Error Message:**

```
%AT-6-BADROUTE: AppleTalk network down; no valid path to  
[atalk_net]
```

**Explanation:**

The system has not heard about a route within the required time-out period. The route has therefore 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:**

Advisory message only. No action required.

---

**Error Message:**

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

**Explanation:**

An unexpected condition was detected by the software. The router takes corrective action and continues.

**Recommended Action:**

Record the entire message and note any AppleTalk problems that you are experiencing. This information should be provided in a problem report to Cisco Systems.

---

**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, example: 25-25.

**Recommended Action:**

Configure the interface via which the Cisco router communicates with the neighboring router to have a cable range of one.

---

**Error Message:**

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

**Explanation:**

Although this router has neighbors which require your internetwork to observe compatibility rules, a route has been learned which has multiple zone names defined. This condition can cause inconsistencies for nodes in your internet.

**Recommended Action:**

Upgrade routers that can only support the original specification of AppleTalk 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 which require your internetwork to observe compatibility rules, a route has been learned which has a wide (greater than one) cable range. This condition can cause inconsistencies for nodes in your internetwork.

**Recommended Action:**

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

---

**Error Message:**

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

**Explanation:**

The AppleTalk configuration was verified by consulting the indicated router.

**Recommended Action:**

Advisory message only. No action required.



---

**Error Message:**

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

**Explanation:**

This message is generated by some **debug** commands to provide additional information about some condition in AppleTalk.

**Recommended Action:**

None. If you are experiencing problems in AppleTalk, these messages should be provided with any other information being provided to Cisco Systems.

---

**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 Cisco default zone (the first zone defined after the **appletalk cable-range** command) and the router which confirmed the Cisco 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. This message is a warning that several router implementations are known to mismanage the default zone.

---

**Error Message:**

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

**Explanation:**

Report that a route has aged out of the AppleTalk internetwork.

**Recommended Action:**

Advisory message only. No action required.

---

**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 already using. This error indicates a serious problem which is not expected to occur. If this is a recurring problem, there may be a physical network problem where the nodes are unable to hear each other.

**Recommended Action:**

None. This Cisco router will restart AppleTalk processing on the common network interface to resolve the address conflict.

---

**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** with the interface type on an interface currently routing AppleTalk.

**Recommended Action:**

Advisory 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 due to 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:**

Advisory 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:**

Advisory message only. No action required.

---

**Error Message:**

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

**Explanation:**

A peer router has become unreachable.

**Recommended Action:**

Advisory 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, then this message appears on the console when a MacIP server cannot begin or recover operations due to an invalid IP address configuration. This 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 that the MacIP server is serving replaces *ZONE-NAME*. The MacIP server's configured IP address replaces *X.X.X.X*.

Note that if this error occurs, the MacIP configuration is considered invalid and is deleted.

**Recommended Action:**

Advisory message only. 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, then this message appears on the console when a MacIP server is no longer operational for any reason. MacIP servers will shutdown 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 that the MacIP server is serving 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-3-MACIPNOCABLE: ZONE-NAME: MacIP inoperable IP
interface, X.X.X.X
```

**Explanation:**

If the **appletalk event-logging** command is configured, then 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 for which it is providing service. This can occur if IP routing is shutdown 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 that the MacIP server is serving 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, then this message appears on the console when a MacIP server has fully initialized and is ready to accept client requests. An AppleTalk zone that the MacIP server is serving 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-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-NEIGHBORUP: [chars]: AppleTalk neighbor up; [node]  
has restarted
```

**Explanation:**

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

**Recommended Action:**

Advisory message only. No action required.

---

**Error Message:**

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

**Explanation:**

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

**Recommended Action:**

Reconfigure one or more of the 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 which 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 peer AppleTalk router.

**Recommended Action:**

Advisory 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:**

Advisory 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:**

Advisory 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 there are less than 250 nodes on your AppleTalk network, contact Cisco. Otherwise, you must split your AppleTalk network into smaller

ones.



---

**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 will occur when an AppleTalk end node is moved between networks and it is therefore misconfigured for the current network.

**Recommended Action:**

Advisory message only. No action required.

---

**Error Message:**

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

**Explanation:**

A previously configured NBP proxy has been deleted. The router will no longer convert NBP requests to a format understood by routers that support only the original specification of AppleTalk.

**Recommended Action:**

Advisory message only. No action required.

---

**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 there is not a valid AppleTalk source address to use 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-NOTRUNNING AppleTalk not running
```

**Explanation:**

You have tried to show or change the AppleTalk configuration, but 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 interface specified has an encapsulation method which does not support AppleTalk.

**Recommended Action:**

Advisory message only. No action required.

---

**Error Message:**

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

**Explanation:**

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

**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:**

Advisory 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*) since the configured port is no longer operational.

**Recommended Action:**

Advisory 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:**

Advisory 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:**

Advisory message only. No action required.

---

**Error Message:**

```
%AT-7-SUBROUTINE_ERROR: AppleTalk error: [chars]
```

**Explanation:**

An internal error has occurred.

**Recommended Action:**

Contact Cisco Systems for assistance.

---

**Error Message:**

```
%AT-5-TABLEERR: AppleTalk table [chars] damaged: [chars]
```

**Explanation:**

An internal error has occurred.

**Recommended Action:**

Contact Cisco Systems 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 one of the routers.

---

**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:**

Advisory 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 which are being advertised to support the **appletalk nbp-proxy** command.

**Recommended Action:**

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

### *BGP Error Messages*

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**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.

## *cBus Error Messages*

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### **Error Message:**

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

### **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-BUFFER: Controller [dec], Error ([hex]),  
Buffersize = [dec], Bufferpool = [dec], number [dec]
```

### **Explanation:**

An internal software error has occurred.

### **Recommended Action:**

Contact Cisco Systems for assistance.

---

### **Error Message:**

```
%CBUS-3-CORRUPT Controller [dec], wrote 0x[hex], read  
0x[hex], loc0x[hex] - dci_memtest()  
%CBUS-3-DAUGHTER Unit [dec], daughter controller [dec]  
failed[chars] test - interface disabled
```

### **Explanation:**

A hardware component failed an internal diagnostic test.

### **Recommended Action:**

Replace the malfunctioning device.

---

**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-HSSIRSET: Interface [chars], Error ([hex]) [chars]
- hssi_reset()
```

**Explanation:**

A hardware component did not respond to a reset command.

**Recommended Action:**

Contact Cisco Systems for assistance.

---

**Error Message:**

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

**Explanation:**

A hardware component did not respond to a reset command.

**Recommended Action:**

Contact Cisco Systems 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-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:**

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

**Explanation:**

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

**Recommended Action:**

If this message recurs, repair or replace the controller.

---

**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.



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**Error Message:**

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

**Explanation:**

A hardware device did not respond appropriately to a request.

**Recommended Action:**

Make sure the device is functioning and is configured correctly.

---

**Error Message:**

```
%CBUS-3-ULTRARSET: Interface [chars], Error ([hex])  
[chars] - ultra_reset()  
%CBUS-3-ULTRARSETU: Unit [dec], Error ([hex]) [chars] -  
ultra_reset()
```

**Explanation:**

A hardware component did not respond to a reset command.

**Recommended Action:**

Contact Cisco Systems for assistance.

---

### ***CHAOSnet Error Messages***

---

**Error Message:**

```
%CHAOS-3-BADMASK Illegal host mask specified: [inet]  
%CHAOS-3-SENDESELF Gateway tried forwarding to self  
%CHAOS-3-ZEROSUBMASK Zero subnet mask
```

**Explanation:**

An internal software error has occurred.

**Recommended Action:**

If any one of these messages recurs, contact Cisco Systems for assistance.

## *CLNS Error Messages*

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### **Error Message:**

```
%CLNS-4-EDATFAIL Encapsulation failed, dst= [chars]
%CLNS-4-EESHFAIL Interface [chars], encapsulation of ESH
failed, HLEN [dec]
```

### **Explanation:**

This message may occur when an interface is down and there is a static neighbor entry 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 or there is no static neighbor entry for that interface, contact Cisco Systems.

---

### **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 any one of these messages recurs, contact Cisco Systems for assistance.

---

## *CPU Card Error Messages*

---

### **Error Message:**

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

### **Explanation:**

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

**Recommended Action:**

Service the console serial port hardware.

### *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. Possible causes:

- A serial line is looped back.
- Another host with the same DECnet address is already present on the Ethernet.

**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.

---

**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.

***EGP Error Messages***

---

**Error Message:**

```
%EGP-3-NOPDB No pdb for [inet]
```

**Explanation:**

An internal software error has occurred.

**Recommended Action:**

If this message recurs, contact Cisco Systems for assistance.

---

**Error Message:**

```
%EGP-3-TOOBIG Insufficient ([dec]) buffering for update  
mes-sage
```

**Explanation:**

An EGP update message was too large to fit into a single buffer.

**Recommended Action:**

Contact Cisco Systems for assistance.

---

***HELLO Protocol Error Messages***

---

**Error Message:**

```
%HELLO-2-NORDB: Redistributed IGRP without rdb
```

**Explanation:**

An internal software error has occurred.

**Recommended Action:**

Contact Cisco Systems for assistance.

## *IGRP Error Messages*

---

**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.

## *Interface Message Processor Error Messages*

---

**Error Message:**

`%IMP-4-DATERR Interface [chars], PSN data error`

**Explanation:**

The Internet Message Processor has received corrupted data. This may be due to cable problems, a hardware problem in the IMP, or a malfunctioning IMP interface.

**Recommended Action:**

If this message recurs, repair or replace the controller.

**Error Message:**

`%IMP-6-GDOWN Interface [chars], PSN going down [chars]`

**Explanation:**

The Internet Message Processor has received corrupted data. This may be due to cable problems, a hardware problem in the IMP, or a malfunctioning IMP interface.

**Recommended Action:**

If this message recurs, repair or replace the controller.

---

**Error Message:**

`%IMP-3-HDHBADMSG Interface [chars], HDH bad message mode`

**Explanation:**

The system received bad data from the IMP.

**Recommended Action:**

If this message recurs, service the IMP and interface hardware.

---

**Error Message:**

`%IMP-3-HDHHIOFF Interface [chars], HDH H/I bit off`

**Explanation:**

The IMP origin bit was not set when it should have been.

**Recommended Action:**

If this message recurs, service the IMP and interface hardware.

---

**Error Message:**

`%IMP-3-LEADERR Interface [chars], PSN leader error,  
subtype [dec]  
%IMP-3-LEADFMT Interface [chars], PSN unknown leader  
format  
%IMP-3-LEADTYPE: Interface [chars], PSN unknown leader type  
[dec]`

**Explanation:**

The Internet Message Processor has received corrupted data. This may be due to cable problems, a hardware problem in the IMP, or a malfunctioning IMP interface.

**Recommended Action:**

If this message recurs, repair or replace the controller.

---

**Error Message:**

`%IMP-5-PSNSTATE: Interface [chars], PSN is [chars]`

**Explanation:**

The connection has gone up or down, depending upon the message in

[chars].

**Recommended Action:**

Determine why the PSN has changed state and take appropriate action.

---

**Error Message:**

```
%IMP-6-RESET Interface [chars], PSN interface reset
```

**Explanation:**

This is an advisory message only.

**Recommended Action:**

Advisory message only. No action required.

### *IP Error Messages*

---

**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 any one of these messages recurs, contact Cisco Systems 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.

## *IP 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, contact Cisco Systems for assistance.

---

### **Error Message:**

```
%IPRT-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.

---

### **Error Message:**

```
%IPRT-4-SAMENET [chars] and [chars] are on the same network  
or subnet
```

### **Explanation:**

The system configuration is inconsistent with the structure of the internetwork.

### **Recommended Action:**

Change the system configuration to reflect the actual network topology.



## *LANCE Error Messages*

---

**Error Message:**

%LANCE-4-BABBLE Unit [dec], babble error, csr0 = 0x[hex]

**Explanation:**

An Ethernet interface is malfunctioning.

**Recommended Action:**

Repair or replace the controller.

---

**Error Message:**

%LANCE-3-BAENCAP Unit [dec], bad encapsulation in idb->enctype= 0x[hex]

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

**Explanation:**

An internal software error has occurred.

**Recommended Action:**

If any one of these messages recurs, contact Cisco Systems 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.

**Recommended Action:**

Repair or replace the controller.

---

**Error Message:**

%LANCE-0-INITFAIL Unit [dec], initialization timeout failure,csr[dec]=0x[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, or 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-0-MEMERR Unit [dec], memory error, csr0 = 0x[hex]`

**Explanation:**

An Ethernet interface detected a hardware problem.

**Recommended Action:**

Repair or replace the controller.

---

**Error Message:**

`%LANCE-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:**

```
%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-SPURINT Unit [dec], spurious interrupt, csr0 =  
0x[hex]
```

**Explanation:**

An Ethernet interface detected a spurious 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. This should never happen unless a serious malfunction has occurred.

**Recommended Action:**

Contact Cisco Systems.

### ***IBM LAN Network Manager Error Messages***

---

**Error Message:**

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

**Explanation:**

The Cisco router has detected a conflict in assigned ring numbers for the specified token ring. The Ring Parameter Server function has not been started 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, contact Cisco Systems 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:**

Contact Cisco Systems about a firmware upgrade for this interface card.

***LAPB Error Messages***

---

**Error Message:**

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

**Explanation:**

A bad X.25 packet was received.

**Recommended Action:**

If this message recurs, check the X.25 serial line and the devices attached to that line.

---

**Error Message:**

```
%LAPB-4-FRAMEERR Interface [chars], Frame error: CF  
0x[hex], VS[dec] [char] VR [dec], Reason 0x[hex]
```

**Explanation:**

A FRMR packet was received. This may be due to a noisy serial line, an overloaded X.25 packet switch, or corrupted data.

**Recommended Action:**

If this message recurs, service the serial line and other devices attached to that line.

---

**Error Message:**

```
%LAPB-4-INFOBAD Interface [chars], Info field not  
permitted  
%LAPB-4-INVNR Interface [chars], Invalid NR value  
%LAPB-4-N1TOOBIG: Interface [chars], N1 too large
```

**Explanation:**

These error messages are produced to interpret the information presented in the previous %LAPB-4-FRAMEERR error message.

**Recommended Action:**

If any one of these messages recurs, check the X.25 serial line and the devices attached to that line.

---

**Error Message:**

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

**Explanation:**

The LAPB protocol was unable to get a buffer to perform the indicated action. The LAPB protocol is designed to handle some loss of frames over a link; failures will affect link performance and may lead to the loss of the connection. Other system functions may suffer from a lack of available memory as well.

**Recommended Action:**

Reduce other system activity to ease memory demands. If conditions warrant, upgrade 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 any one of these messages recurs, contact Cisco Systems for assistance.

## *LAT 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 any one of these messages recurs, contact Cisco Systems 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 one of these messages recurs, contact Cisco Systems for assistance.

---

## *Data Link Error Messages*

---

### **Error Message:**

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

### **Explanation:**

An internal software error has occurred.

### **Recommended Action:**

If this message recurs, contact Cisco Systems for assistance.

---

**Error Message:**

`%LINK-2-BADVCALL: Ints. TDR=[dec]`

**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, contact Cisco Systems for assistance.

---

**Error Message:**

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

**Explanation:**

This is an advisory message only.

**Recommended Action:**

No action is required.

---

**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 one of these messages recurs, contact Cisco Systems for assistance.



## *ChipCom Mailbox Error Messages*

---

### **Error Message:**

```
%MAILBOX-3-BADDATA: Bad data in mailbox test, got 0x[hex],
expected 0x[hex]
%MAILBOX-3-FLAGSTAT: Timeout while waiting for FLAGSTAT,
status=0x[hex]
%MAILBOX-3-INITPC2: Timeout waiting for PC2 during
initialization, status=0x[hex]
%MAILBOX-3-INTERR: Bad mailbox interrupt = 0x[hex]
%MAILBOX-3-MAIL020: Timeout while waiting for MAIL020,
status=0x[hex]
%MAILBOX-3-MAILFAIL: Mailbox failed to initialize
%MAILBOX-3-PC2: Timeout while waiting for PC2,
status=0x[hex]
%MAILBOX-3-SPURINT: Spurious mailbox interrupt = 0x[hex],
MAIL020 not asserted
```

### **Explanation:**

A hardware problem was detected in a ChipCom interface board.

### **Recommended Action:**

If this message recurs, contact Cisco Systems for assistance.

## *MCI 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 re-enabled in 30 seconds.

### **Recommended Action:**

If this message recurs, check the communications lines.

---

**Error Message:**

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

**Explanation:**

The configuration PAL is missing.

**Recommended Action:**

If this message recurs, contact Cisco Systems 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 0x[hex]  
%MCI-3-RXINDEX Unit [dec], invalid RX index [dec]  
%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.

**Recommended Action:**

This generally indicates a hardware problem. Contact Cisco Systems for assistance.

---

**Error Message:**

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

**Explanation:**

A hardware component failed an internal diagnostic test.

**Recommended Action:**

Replace the malfunctioning component.

### *MK5025 Error Messages*

---

**Error Message:**

```
%MK5-3-BADENCAP Unit [dec], bad encapsulation inidb-  
>enctype = 0x[hex]  
%MK5-3-BADUNIT Bad unit number [dec]
```

**Explanation:**

An internal software error has occurred.

**Recommended Action:**

If any one of these messages recurs, contact Cisco Systems for assistance.

---

**Error Message:**

```
%MK5-0-INITFAIL Unit [dec], initialization timeout  
failure,csr[dec]=0x[hex]  
%MK5-0-INITNOPPRIM Unit [dec], initialization failure -  
NoCSR1_PPRIM_INIT_CONF,  
csr1 = 0x[hex]  
%MK5-0-INITUERR Unit [dec], initialization CSR1_UERR  
failure,csr1=0x[hex]
```

**Explanation:**

The hardware failed to initialize correctly.

**Recommended Action:**

Repair or replace the controller.

---

**Error Message:**

```
%MK5-0-MEMERR Unit [dec], memory error, csr0 = 0x[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 =  
0x[hex], pak =0x[hex]
```

```
%MK5-3-OUTENCAP Unit [dec], bad output packet  
encapsulation: 0x[hex]
```

**Explanation:**

An internal software error has occurred.

**Recommended Action:**

If any one of these messages recurs, contact Cisco Systems for assistance.

---

**Error Message:**

```
%MK5-3-PLOSTERR Unit [dec], provider primitive lost,csr0 =
0x[hex],
  csr1 = 0x[hex]
%MK5-3-PPRIMERR Unit [dec], unexpected provider
primitive,csr0 = 0x[hex],
  csr1 = 0x[hex] csr0 = 0x[hex], csr1 = 0x[hex]
%MK5-3-SPURPPRIMERR Unit [dec], spurious provider
primitive,csr0 = 0x[hex],
  csr1 = 0x[hex]
%MK5-3-UPRIMERR Unit [dec], user primitive error,csr0 =
0x[hex], csr1 = 0x[hex]
```

**Explanation:**

A network serial interface detected a hardware problem.

**Recommended Action:**

Repair or replace the controller.

### ***X.25 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 one of these messages recurs, contact Cisco Systems for assistance.

## *PPP Error Messages*

---

### **Error Message:**

`%PPP-4-CONFNAK fsm_rconfnak([hex]) - possible CONFNAK loop`

### **Explanation:**

An internal software error has occurred.

### **Recommended Action:**

If this message recurs, contact Cisco Systems for assistance.

---

### **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.

---

## *Parallel Printer Error Messages*

---

### **Error Message:**

`%PR-3-DAEMON: lpt_daemon assigned to a non-lpt`  
`%PR-3-WRONGWATCH: Tty [t-line], lptwatch called for non-`  
`lpt`

### **Explanation:**

An internal software error has occurred.

### **Recommended Action:**

If any one of these messages recurs, contact Cisco Systems for assistance.

## *PUP Error Messages*

---

**Error Message:**

`%PUP-2-ZEROSUB: Zero subnet mask`

**Explanation:**

The IP network used in the **pup map** command is not subnetted.

**Recommended Action:**

Enter a subnetted IP address as required by the **pup map** command.

## *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, contact Cisco Systems for assistance.

## *RIP Error Messages*

---

**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*

---

### **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 any one of these messages recurs, contact Cisco Systems for assistance.

---

### **Error Message:**

```
%RSRB-3-BADVERSIONIF IFin: [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 Cisco Systems 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 Cisco Systems for an update.



---

**Error Message:**

```
%RSRB-3-BADVERSIONUDP: UDPin: [chars]: version mismatch,  
mine [dec], theirs [dec]
```

**Explanation:**

The remote end of a UDP 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 Cisco Systems 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]  
%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 one of these messages recurs, contact Cisco Systems 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 *tn*.

---

**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 any one of these messages recurs, contact Cisco Systems 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 one of these messages recurs, contact Cisco Systems for assistance.

---

**Error Message:**

```
%RSRB-3-SENDPUNTIIF [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.

### *SBE Serial Interface Error Messages*

---

**Error Message:**

```
%SBE-5-BADBREAK Questionable break? buffer [dec];[hex]
```

**Explanation:**

An internal software error has occurred.

**Recommended Action:**

If this message recurs, contact Cisco Systems for assistance.

---

**Error Message:**

```
%SBE-5-HUNGUP Interface [chars], hung up - resetting  
%SBE-4-RSETFAIL Failed to reset interface Serial[dec]
```

**Explanation:**

The SBE hardware is malfunctioning, or the firmware is improperly inserted.

**Recommended Action:**

Repair or replace the controller.

## ***SDLC 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 that line.

---

### **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 due to excessive congestion on the output link.

### **Recommended Action:**

If this message frequently occurs, determine why your SDLC link is being overloaded with data, and resolve the cause (typically, by either increases bandwidth to your SDLC line or reducing the load on your link).

---

### **Error Message:**

`%SDLC-4-FRAMEERR: Interface [chars], Frame error: CF  
0x[hex], VS [dec] [char] VR [dec], Reason 0x[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 other devices attached to that line.

---

**Error Message:**

```
%SDLC-4-INFOBAD: Interface [chars], Info field not
permitted
%SDLC-4-INVNR: Interface [chars], Invalid NR value
%SDLC-4-INVNR: Interface [chars], N1 too large
```

**Explanation:**

A bad SDLC frame was received.

**Recommended Action:**

If any one of these messages recurs, check the SDLC serial line and the devices attached to that line.

---

**Error Message:**

```
%SDLC-4-NOFRMRSPACE: Cannot allocate a FRMR frame
```

**Explanation:**

The Cisco router wished to generate a FRMR frame, but could not allocate the memory needed for the frame.

**Recommended Action:**

The fact that memory is so low as to not allocate the frame is a far more serious problem than the reason the FRMR is being generated itself. Fix the cause of low memory, and if this problem still occurs, determine why the FRMR must be sent.

---

**Error Message:**

```
%SDLC-3-NOINPIDB: Input idb not set
```

**Explanation:**

A frame was given to the SDLC handler to process, but the interface on which the frame arrived is not known.

**Recommended Action:**

This is a software error and should be reported to Cisco Systems' Technical Assistance Center.

---

**Error Message:**

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

**Explanation:**

An internal software error occurred in the SDLC processing system in the Cisco Systems router.

**Recommended Action:**

This is a software error. Please contact Cisco Systems for assistance.

### *IP Security Error Messages*

---

**Error Message:**

```
%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 one of these messages recurs, contact Cisco Systems 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*

---

### **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 any one of these messages recurs, contact Cisco Systems for assistance.

## *STUN 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, contact Cisco Systems 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 the Serial Tunnel, 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, contact Cisco Systems for assistance.

---

**Error Message:**

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

**Explanation:**

The system does not have sufficient memory to support some or all of the Serial Tunnel configuration.

**Recommended Action:**

Reduce system configuration and take other actions as appropriate to increase memory available for Serial Tunnel operations.



---

**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 (OPENED, PASSIVE-OPEN) successfully or is in the process of being opened (OPENING).

**Recommended Action:**

This is good, expected behavior. Nothing need be done.

---

**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 Serial Tunnel reconfiguration or disabling.

**Recommended Action:**

This is good, expected behavior. Nothing need be done.

---

**Error Message:**

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

**Explanation:**

An internal software error has occurred.

**Recommended Action:**

If this message recurs, contact Cisco Systems 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:**

Advisory 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 any one of these messages recurs, contact Cisco Systems for assistance.

---

**Error Message:**

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

**Explanation:**

A remote peer has closed a Serial Tunnel 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 Serial Tunnel 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.)

## Operating System Error Messages

---

### Error Message:

```
%SYS-2-ALREADYFREE: Buffer [hex] already in free pool
[chars]
%SYS-3-BADDISP Bad dispose code [hex] in [chars]
%SYS-2-BADPID Bad pid [dec] for tty [t-line]
%SYS-2-BADSHARE Bad sharecount in [chars],
ptr=[hex],count=[hex]
%SYS-2-BADSTACK: Process [chars] has trashed stack, old
size [dec]
%SYS-2-CFORKLEV cfork at level [dec]
%SYS-5-CONFIG: Configured from [chars] by [inet]
%SYS-5-CONFIG_I: Configured from [chars] by [chars]
%SYS-5-CONFIG_M: Configured via MOP from [chars] by [enet]
%SYS-2-FREEBAD Attempted to free memory at [hex], not part
of buffer pool
%SYS-2-FREEFREE Attempted to free unassigned memory
at[hex], deallocated at [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]
%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-2-INVALID Free([dec]): [hex] [hex] [hex] [hex]
[hex][hex] [hex] [hex] [hex] [hex] -malloc([dec]): [hex]
[hex] [hex] [hex] [hex] [hex] [hex] [hex] [hex] [hex]
%SYS-2-INVFREE Invalid free list
%SYS-2-INVRETURN Invalid returned memory 0x[hex]
%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-NOBLOCK [chars] with blocking disabled
```

### Explanation:

An internal software error has occurred.

### Recommended Action:

If any one of these messages recurs, contact Cisco Systems 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-2-NOMEMORY: No memory available for [chars] [dec]
```

**Explanation:**

An operation could not be accomplished due to 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 Process self-destruction failed
%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]
%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-4-REGEXP [chars]
```

**Explanation:**

An internal software error has occurred.

**Recommended Action:**

If any one of these messages recurs, contact Cisco Systems for assistance.

---

**Error Message:**

```
%SYS-5-RELOAD Reload requested
%SYS-5-RESTART System restarted
```

**Explanation:**

This is an advisory message only.

**Recommended Action:**

No action is required.

---

**Error Message:**

```
%SYS-2-RETBUF Bad retbuffer, ptr= [hex]
%SYS-2-RETBUF1: 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-2-SMASHED Smashed block at [hex], next [hex], prev
[hex],size [dec]
%SYS-2-SMASHEDINFO: Smashed block last freed [hex],
allocated by [hex], name [chars]
%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 one of these messages recurs, contact Cisco Systems 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.

### *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 (five 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 which has already timed out. It may also be due to an internal software problem.

**Recommended Action:**

If this message recurs, contact Cisco Systems.

### *TCP 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 any one of these messages recurs, contact Cisco Systems for assistance.

### *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.



## *Telnet Error Messages*

---

### **Error Message:**

```
%TN-2-BADLOGIN Bad login string pointer 0x[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 one of these messages recurs, contact Cisco Systems for assistance.

## *Token Ring Error Messages*

---

### **Error Message:**

```
%TR-3-ASYNCUSE Unit [dec], [chars], async in use
```

### **Explanation:**

Another internal process is communicating to the given Token Ring interface.

### **Recommended Action:**

Wait one minute and try again. If the condition persists then it probably indicates an internal software error. Contact Cisco Systems.

### **Error Message:**

```
%TR-4-BADADAPT Unit [dec], adapter not responding 0x[hex]
0x[hex]0x[hex] 0x[hex]
```

### **Explanation:**

The Token Ring interface is not responding to initialization.

**Recommended Action:**

Check the Token Ring card's configuration and make sure it is in the correct slot. The Token Ring card (CSC-R) is a Multibus master; it must be part of a contiguous group of bus master cards that includes the CPU. In most configurations the 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. Contact Cisco Systems.

---

**Error Message:**

```
%TR-3-BADBRDGPARGS: Unit [dec], bad bridge parameters:
bridge_num=[dec], max_rd= [dec]\nthisring=[dec],
targetring=[dec]
%TR-3-BADBUFSIZE: Unit [dec], bad buffersize = [dec]
%TR-3-BADFIRM: Unit [dec], Tokenring firmware download
failed\n got 0x[hex], expected 0x[hex], at address
0x[hex].[hex]
%TR-3-BADFIRMTYPE: Unit [dec], bad firmware type code
during [chars]. type=0x[hex], fw=0x[hex]
%TR-3-BADFUNC: Unit [dec], bad functional address=0x[hex],
ring mode=0x[hex]
```

**Explanation:**

An internal software error has occurred.

**Recommended Action:**

If any one of these messages recurs, contact Cisco Systems 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-BADRNGNUM: 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-BADSTART Unit [dec], Start completion and wrong idb  
state -state= [dec]  
%TR-4-BKGND Unit [dec], bkgnd int: last packet out [dec]ms  
%TR-4-BKGNDINT Unit [dec], bkgnd int: [hex][hex]  
[hex][hex][hex][hex] [hex][hex]  
%TR-3-COMPFAIL Unit [dec], Tbuf completion failure, result  
0x[hex]  
%TR-3-FILTFAIL Unit [dec], SRB filter set failed: 0x[hex]  
0x[hex]0x[hex] 0x[hex] (blk 0x[hex]) downing  
%TR-3-GETCONF Unit [dec], get_config failed, result  
0x[hex] 0x[hex]
```

**Explanation:**

An internal software error has occurred.

**Recommended Action:**

If any one of these messages recurs, contact Cisco Systems for assistance.

---

**Error Message:**

```
%TR-3-INCOM Unit [dec], incompatible firmware: system  
0x[hex],interface 0x[hex]
```

**Explanation:**

The Token Ring interface contains firmware that is incompatible with the system software.

**Recommended Action:**

Call Cisco Systems to upgrade the Token Ring Monitor firmware and/or the system software.

---

**Error Message:**

```
%TR-3-INITFAIL: Unit [dec], init failed. result  
code=0x[hex], error code=0x[hex]
```

**Explanation:**

The Token Ring hardware has failed to initialize properly.

**Recommended Action:**

Copy down the error message exactly as it appears and convey it to Cisco Systems.

---

**Error Message:**

```
%TR-4-INTFAIL Unit [dec] interface failure: 0x[hex]  
0x[hex] 0x[hex],idb state [dec]
```

**Explanation:**

The Token Ring Monitor firmware has detected a fatal error due either to an internal software problem or a hardware failure.

**Recommended Action:**

Copy down the error message exactly as it appears and convey it to Cisco Systems.

---

**Error Message:**

```
%TR-3-MODEFAIL: Unit [dec], change mode failed. result  
code=0x[hex], error code=0x[hex]  
%TR-3-MODFAIL Unit [dec], tra_modify failed, result  
0x[hex] 0x[hex]  
%TR-3-NOFIRM: Unit [dec], no TMS380 firmware present.  
eagle=0x[hex], magic=0x[hex]
```

**Explanation:**

An internal hardware or software error has occurred.

**Recommended Action:**

Copy down the error message exactly as it appears and convey it to Cisco Systems.

---

**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-3-NOPAK Unit [dec], Tbuf completion and no pakout`

**Explanation:**

An internal software error has occurred.

**Recommended Action:**

If this message recurs, contact Cisco Systems for assistance.

---

**Error Message:**

`%TR-3-OPENFAIL Unit [dec], open failed: [chars], [chars]  
(0x[hex])`

**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 will indicate the stage of initialization at which error occurred, and the second will describe the error.

**Recommended Action:**

Try to open the interface again. This can generally be accomplished by issuing the **clear interface tokenring** command. If the error message recurs, contact Cisco Systems.

---

**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 can generally be accomplished by issuing the **clear interface tokenring** command. If the error message recurs, contact Cisco Systems.

---

**Error Message:**

```
%TR-3-PANIC Unit [dec], panic [hex] [hex] [hex]
```

**Explanation:**

The Token Ring Monitor firmware has detected a fatal error which indicates an impending interface failure.

**Recommended Action:**

The error message should be copied down exactly as it appears and included together with the interface error message. All this information should be conveyed to Cisco Systems.

---

**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:**

The error message should be copied down exactly as it appears and conveyed to Cisco Systems.

---

**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:**

The error message should be copied down exactly as it appears and conveyed to Cisco Systems.

---

**Error Message:**

```
%TR-3-RESETFAIL: Unit [dec], reset failed, error code [hex].  
%TR-3-RIFBADMAGIC: Invalid magic number (0x[hex]) in RIF [chars] table entry (0x[hex]).  
%TR-3-RIFTBLTRASH: Trashed [chars] RIF table entry (0x[hex]) found and zeroed.
```

**Explanation:**

An internal software error occurred.

**Recommended Action:**

If message recurs, contact Cisco Systems.

---

**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 the problem persists call Cisco Systems.

---

**Error Message:**

```
%TR-3-SETFUNFAIL: Unit [dec], set functional address
failed (code [hex])
%TR-3-SETGRPFAIL: Unit [dec], set group address failed
(code [hex])
%TR-3-SETOPTFAIL: Unit [dec], set open options failed
(code 0x[hex]).
%TR-3-SMTSTATFAIL: Unit [dec], get_smt: get smt stats
failed - result [hex]
```

**Explanation:**

An internal software error occurred.

**Recommended Action:**

If message recurs, contact Cisco Systems.

---

**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 Cisco Systems.

---

**Error Message:**

```
%TR-3-STARTFAILED Unit [dec], start failed, result
0x[hex],reason 0x[hex]
```

**Explanation:**

The Token Ring Monitor firmware attempted to insert the system into the ring and the chip set detected a nonstandard fatal error.

**Recommended Action:**

This message indicates a problem with the Token Ring chip set hardware. Call Cisco Systems.



---

**Error Message:**

```
%TR-6-STATE [chars]
```

**Explanation:**

This message is displayed when the Token Ring's status has changed as determined by the chip set. This information is also used to automatically determine if the interface is still usable to propagate network traffic.

**Recommended Action:**

This is an advisory message only. No action is 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, contact Cisco Systems for assistance.

---

**Error Message:**

```
%TR-6-STATRING [chars] ([hex]) LIV 0x[hex]
```

**Explanation:**

This message is displayed when the Token Ring's status has changed as determined by the chip set. This information is also used to automatically determine if the interface is still usable to propagate network traffic.

If the hexadecimal status code in this message is zero (0), it indicates that the ring has returned to a normal state. Otherwise, the first hexadecimal number is the sum of one or more status codes which indicate unusual conditions on the ring. The meaning of each status code is shown in Table 4, "Token Ring Status Codes."

**Recommended Action:**

Check the ring for the indicated condition.

**Table 4: Token Ring Status Codes**

<b>Code</b>	<b>Explanation</b>	<b>Fatal</b>
0x8000	Signal loss	Yes
0x4000	Hard error	Yes
0x2000	Soft error	No
0x1000	Transmit beacon	Yes
0x0800	Lobe wire fault	Yes
0x0400	Auto removal error	Yes
0x0100	Receive request removed	Yes
0x0080	Counter overflow	No
0x0040	Single station	No
0x0020	Ring recovery	No

**Error Message:**

```
%TR-3-TRACMD tra_cmd: bad state: cmd 0x[hex]  
0x[hex],result 0x[hex] 0x[hex] (blk 0x[hex], iob 0x[hex])  
%TR-4-UNKNOWNCOMP Unit [dec], Unknown command  
completion:cmd 0x[hex], rslt 0x[hex]  
%TR-3-UNKNOWNNT2M Unit [dec], Unknown t2m command [hex]  
[hex]
```

**Explanation:**

An internal software error has occurred.

**Recommended Action:**

If any one of these messages recurs, contact Cisco Systems 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.

## *VINES Error Messages*

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### **Error Message:**

```
%VINES-2-NEIGHBOR vines_update called with null neighbor
%VINES-2-ROUTEADD: Cannot add route for [hex]:[hex],
neighbor doesn't exist.
```

### **Explanation:**

An internal software error has occurred.

### **Recommended Action:**

If any one of these messages recurs, contact Cisco Systems for assistance.

## *X.25 Error Messages*

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### **Error Message:**

```
%XX25-4-BADUPCALL Interface [chars], Unexpected call
([chars]) from LLC2 DTE=[hex].[hex].[hex].
%X25-2-ILLP4 Illegal state [chars] when P4
%X25-3-INTIMEQ Interface [chars], LCN [dec] already in
timer queue, new time [dec]
%X25-3-NOLCI Delete: lci [dec] not found in [chars] table
%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]
%X25-3-REWRITE Error rewriting called address in X25-
Switch
```

### **Explanation:**

An internal software error has occurred.

### **Recommended Action:**

If any one of these messages recurs, contact Cisco Systems for assistance.

## *XNS Error Messages*

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### **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 one of these messages recurs, contact Cisco Systems for assistance.