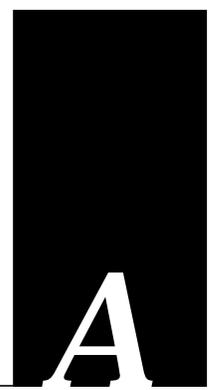# *Appendix A*
System Error Messages

This appendix documents all system error messages, as of software release 8.3, 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

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

```
%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 A-1 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 A-2 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 (`[ ]`). For example, a decimal number is represented as `[dec]`. A complete list of the kinds of variable fields, and the information contained in them, appears in Table A-3.

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 chapter 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 appendix 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 variables fields contained in some of the messages.

Table A-1   Facility Codes

Code	Facility
AT	AppleTalk
BGP	Border Gateway Protocol
CBUS	The cBus controller
CHAOS	CHAOSnet
CLNS	OSI Connectionless Network Services
CSC2	CSC2/CSC3 CPU card
DNET	DECnet
EGP	Exterior Gateway Protocol
HELLO	HELLO Protocol
HSSI	High Speed Serial Interface Card
IGRP	Interior Gateway Routing Protocol
ILAN	Interlan Ethernet controller
IMP	Interface Message Processor
IP	Internet Protocol
IPRT	IP Routing
LANCE	STS-10x or IGS Ethernet Interface
LAPB	X.25 Link Access Protocol – Binary
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
PPP	Point-to-Point Protocol
PR	Parallel Printer devices
PUP	Xerox PARC Universal Packet protocol
RIP	BSD IP Routing Information Protocol

RSRB	Remote Source Routing Bridge
SBE	SBE serial interface
SEC	IP Security
SLIP	Serial Link IP
SRB	Source Routing Bridge
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
ULTRA	Ultranet card
VINES	Banyan VINES
X25	X.25
XNS	Xerox Network Services

Table A-2   Severity Levels

Number	Explanation
0	System is unusable.
1	Action must be taken immediately.
2	Critical condition.
3	Functionality may be affected.
4	Warning condition.
5	Normal but significant condition.
6	Informational message.
7	Appears during debugging only.

Table A-3   Representation of Variable Fields in Error Messages

Representation	Type of Information
[dec]	Decimal number
[hex]	Hexadecimal number
[char]	Single character
[chars]	Character string
[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

Some error messages which describe internal errors contain traceback information. This information is very important and should be included when you report a problem to Cisco Systems.

The following sample error message includes traceback information.

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

AppleTalk Error Messages

Error Message:

`%AT-5-ADDRINUSE [chars]: AppleTalk address [network].[node] already in use`

Explanation:

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

Recommended Action:

No action required.

Error Message:

`%AT-6-ADDRUSED [chars]: using AppleTalk address [network].[node]`

Explanation:

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

Recommended Action:

No action required.

Error Message:

`%AT-6-AQUIREMODE [chars]: AppleTalk querying network for configuration`

Explanation:

This is an advisory message only.

Recommended Action:

No action is required.

Error Message:

```
%AT-5-BADNEIGHBOR: [chars]:AppleTalk neighbor (advertising [chars]) is miscon-
figured, ignored
```

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 route to net [chars] has been marked bad
```

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-5-COMPATERR1: [chars]: Neighbor at [chars] only supports AppleTalk
internets in compatibility mode
```

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: Zones for net [chars] are incompatible with some AppleTalk routers in internet`

Explanation:

One or more seed routers in the AppleTalk network have zone lists which are missing some zone names.

Recommended Action:

Be sure that all seed routers in an AppleTalk network are configured with identical zone lists.

Error Message:

`%AT-5-COMPATERR3: Cable range [chars] is incompatible with some AppleTalk routers in internet`

Explanation:

One or more routers in the AppleTalk network has a cable range configuration which is not the same as the cable range configuration on this router.

Recommended Action:

It will be necessary to properly configure all routers to have identical cable ranges for a common cable.

Error Message:

`%AT-6-CONFIGOK [chars]: AppleTalk configuration verified by [dec].[dec], port activated`

Explanation:

The AppleTalk configuration was verified by consulting the indicated router.

Recommended Action:

No action required.

Error Message:

`%AT-5-DUPADDR: [chars]: Our AppleTalk node address used by [enet], restarting line protocol`

Explanation:

Another AppleTalk node on a common network interface has claimed the same AppleTalk address which this router was already using.

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]: Configuration conflicts with port [chars] (inter-
face [chars])
```

Explanation:

An attempt was made to configure an interface to have the same 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]: Interface cleared, AppleTalk port reinitializing
```

Explanation:

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

Recommended Action:

None. This message is for informational purpose.

Error Message:

```
%AT-5-INTDOWN [chars]: AppleTalk port disabled, Line protocol went 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, service the hardware.

Error Message:

```
%AT-6-INTUP [chars]: AppleTalk port reinitializing, 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-6-LOSTNEIGHBOR AppleTalk neighbor at [network].[node]has been deleted
```

Explanation:

A peer router has become unreachable.

Recommended Action:

Advisory message only. No action required.

Error Message:

```
%AT-3-MCMISMATCH [chars]: Netinfo zone multicast address disagrees with us
(theirs=[enet], ours=[enet])
```

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 at [chars] has restarted
```

Explanation:

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

Recommended Action:

None. This is an informational message.

Error Message:

```
%AT-3-NETDISAGREES [chars]: Net range does not match other routers, port
disabled
```

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]: Net [chars] is not valid for current AppleTalk
internet, port disabled
```

Explanation:

The network range overlaps with that of other networks in the internet.

Recommended Action:

Reconfigure the router.

Error Message:

```
%AT-6-NEWNEIGHBOR AppleTalk neighbor at [network].[node] has been added
```

Explanation:

The router discovered a new peer AppleTalk router.

Recommended Action:

Advisory message only. No action required.

Error Message:

```
%AT-6-NEWROUTE AppleTalk net [chars] has been added, [dec]hops, reported by
[network].[node]
```

Explanation:

A new network has come up.

Recommended Action:

Advisory message only. No action required.

Error Message:

```
%AT-3-NOADDRSAVAIL [chars]: Couldn't assign any AppleTalk address
```

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: AppleTalk node [chars] is not valid for [chars], sent correct
configuration
```

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.

Recommended Action:

None. This is an information message.

Error Message:

```
%AT-3-NOSRCADDR: [chars]: No AppleTalk node address available to use as packet
source
```

Explanation:

The interface out which a newly created AppleTalk packet is destined to be sent has no AppleTalk address.

Recommended Action:

Verify that the interface specified in the error message is properly configured.

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:

Change the configuration to activate AppleTalk routing.

Error Message:

```
%AT-5-NOTSUPPORTED: [chars]: line protocol does not support this AppleTalk port
configuration
```

Explanation:

The interface specified has an encapsulation method which does not support fast switching.

Recommended Action:

This is an informational message. No action required.

Error Message:

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

Explanation:

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

Recommended Action:

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]: No other AppleTalk router found, port activated`

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-ROUTENOTIFY AppleTalk route to net [chars] reported bad by [dec].[dec]`

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: AppleTalk route to net [chars] has been restored`

Explanation:

A routing update has been received for a previously suspect route.

Recommended Action:

This message is for informational purposes only.

Error Message:

```
%AT-3-ZONEDISAGREES [chars]: Zone does not match other routers, port disabled
```

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, [chars], has been discarded
```

Explanation:

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

Recommended Action:

This message is for informational purposes only.

BGP 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.

cBus Error Messages

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], Buffer-
pool = [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()

%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-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-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, service the hardware.

Error Message:

```
%CBUS-3-TESTFAIL Unit [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-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()
```

Explanation:

A hardware component did not respond to a reset command.

Recommended Action:

Contact Cisco Systems for assistance.

Error Message:

```
%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-SENDSELF 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

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.

CSC2 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:

1) A serial line is looped back

2) 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 which 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 message
```

Explanation:

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

Recommended Action:

Contact Cisco Systems for assistance.

HELLO 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.

ILAN Error Messages

Error Message:

```
%ILAN-4-RSETFAIL Interface [chars], unable to reset because [chars]
```

Explanation:

The InterLAN Ethernet controller was unable to reset.

Recommended Action:

Repair or replace the controller.

IMP 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, service the hardware.

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, service the hardware.

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] imperror
```

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, service the hardware.

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:

No action is required.

IP Error Messages

Error Message:

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

Explanation:

An internal software error has occurred.

Recommended Action:

If this message recurs, contact Cisco Systems for assistance.

Error Message:

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

Explanation:

An internal software error has occurred.

Recommended Action:

If this message 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.

IPRT 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 internet.

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:

Service the hardware.

Error Message:

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

Explanation:

An internal software error has occurred.

Recommended Action:

If this message recurs, contact Cisco Systems for assistance.

Error Message:

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

Explanation:

An internal software error has occurred.

Recommended Action:

If this message 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:

Service the hardware.

Error Message:

```
%LANCE-0-INITFAIL Unit [dec], initialization timeout failure,csr[dec]=0x[hex]
```

Explanation:

The hardware failed to initialize correctly.

Recommended Action:

Service the hardware.

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:

Service the hardware.

Error Message:

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

Explanation:

An Ethernet transceiver is unplugged or faulty.

Recommended Action:

Service the hardware.

Error Message:

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

Explanation:

An Ethernet interface detected a hardware problem.

Recommended Action:

Service the hardware.

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:

Service the hardware or contact Cisco Systems.

Error Message:

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

Explanation:

An Ethernet interface generated a spurious Initialization Done interrupt.

Recommended Action:

Service the hardware.

Error Message:

```
%LANCE-3-SPURINT Unit [dec], spurious interrupt, csr0 = 0x[hex]
```

Explanation:

An Ethernet interface detected a spurious interrupt.

Recommended Action:

Service the hardware.

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.

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 largebadx25pkt
```

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-3-NOINPIDB Input idb not set
```

Explanation:

An internal software error has occurred.

Recommended Action:

If this message recurs, contact Cisco Systems for assistance.

Error Message:

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

Explanation:

An internal software error has occurred.

Recommended Action:

If this message recurs, contact Cisco Systems for assistance.

Error Message:

```
%LAPB-6-OUTPUT Interface [chars], LAPB O [chars] [chars]
```

Explanation:

An FRMR packet was discarded due to congestion.

Recommended Action:

If this message recurs, contact Cisco Systems.

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-ETHERNET No Ethernet to run LAT over
```

Explanation:

The LAT facility cannot be used unless the system is connected to and active on an Ethernet.

Recommended Action:

Make sure your system is configured correctly, and that the Ethernet interface, if present, is operational.

Error Message:

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

%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]

%LAT-3-SIGERR Tty[t-line], Unknown signal [dec] in [chars]
```

Explanation:

An internal software error has occurred.

Recommended Action:

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

Link Error Messages

Error Message:

%LINK-3-BADETHER 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-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 this message recurs, contact Cisco Systems for assistance.

MAILBOX Error Messages

Error Message:

`%MAILBOX-3-BADDATA: Bad data in mailbox test, got 0x[hex], expected 0x[hex]`

Explanation:

A hardware problem was detected in a Chipcom interface board.

Recommended Action:

If this message recurs, contact Cisco Systems for assistance.

Error Message:

`%MAILBOX-3-FLAGSTAT: Timeout while waiting for FLAGSTAT, status=0x[hex]`

Explanation:

A hardware problem was detected in a Chipcom interface board.

Recommended Action:

If this message recurs, contact Cisco Systems for assistance.

Error Message:

`%MAILBOX-3-INITPC2: Timeout waiting for PC2 during initialization, sta-`
`tus=0x[hex]`

Explanation:

A hardware problem was detected in a Chipcom interface board.

Recommended Action:

If this message recurs, contact Cisco Systems for assistance.

Error Message:

`%MAILBOX-3-INTERR: Bad mailbox interrupt = 0x[hex]`

Explanation:

A hardware problem was detected in a Chipcom interface board.

Recommended Action:

If this message recurs, contact Cisco Systems for assistance.

Error Message:

```
%MAILBOX-3-MAIL020: Timeout while waiting for MAIL020, status=0x[hex]
```

Explanation:

A hardware problem was detected in a Chipcom interface board.

Recommended Action:

If this message recurs, contact Cisco Systems for assistance.

Error Message:

```
%MAILBOX-3-MAILFAIL: Mailbox failed to initialize
```

Explanation:

A hardware problem was detected in a Chipcom interface board.

Recommended Action:

If this message recurs, contact Cisco Systems for assistance.

Error Message:

```
%MAILBOX-3-PC2: Timeout while waiting for PC2, status=0x[hex]
```

Explanation:

A hardware problem was detected in a Chipcom interface board.

Recommended Action:

If this message recurs, contact Cisco Systems for assistance.

Error Message:

```
%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-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 simulta-
neously
```

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 con-
troller – mci_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:

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

Explanation:

A hardware component failed an internal diagnostic test.

Recommended Action:

Replace the malfunctioning device.

MK5 Error Messages

Error Message:

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

Explanation:

An internal software error has occurred.

Recommended Action:

If this message recurs, contact Cisco Systems for assistance.

Error Message:

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

Explanation:

An internal software error has occurred.

Recommended Action:

If this message 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:

Service the hardware.

Error Message:

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

Explanation:

A network serial interface detected a hardware problem.

Recommended Action:

Service the hardware.

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]
```

Explanation:

An internal software error has occurred.

Recommended Action:

If this message recurs, contact Cisco Systems for assistance.

Error Message:

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

Explanation:

An internal software error has occurred.

Recommended Action:

If this message 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:

Service the hardware.

PAD Error Messages

Error Message:

```
%PAD-3-GETLINE Tty[t-line], bad return code [dec] fromx3_getline()
```

```
%PAD-2-GETSTRING: Pad[t-line], Invalid lci idb pointer [hex], pcb: [hex], lci
[hex]
```

```
%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.

PR Error Messages

Error Message:

```
%PR-3-DAEMON: lpt_daemon assigned to a non-lpt
```

Explanation:

An internal software error has occurred.

Recommended Action:

If this message recurs, contact Cisco Systems for assistance.

Error Message:

`%PR-3-WRONGWATCH: Tty [t-line], lptwatch called for non-lpt`

Explanation:

An internal software error has occurred.

Recommended Action:

If this message 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.

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 [dec]/[inet], [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-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 *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 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-PEERSTAT Peer [chars], wrong state [dec]
```

```
%RSRB-4-OPTNULL: Remopened and t NULL
```

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-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.

SBE 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:

Service the hardware.

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, PASSIVEOPEN) 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:

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

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-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 bufferheader r, 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-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-6-STACKLOW Stack for [chars] [chars] running low, [dec]/[dec]

%SYS-2-SPEC Trying to set unknown special character [dec] to [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.

TAC 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.

TMQ 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:

Informational message only.

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-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-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:

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

Error Message:

```
%TR-3-MODFAIL Unit [dec], tra_modify failed, result 0x[hex] 0x[hex]
```

Explanation:

An internal software error has occurred.

Recommended Action:

If this message recurs, contact Cisco Systems for assistance.

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].`

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-SETFAIL Unit [dec], couldn't set interface to physical address [enet] (0x[hex])`

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])
```

Explanation:

An internal software error occurred.

Recommended Action:

If message recurs, contact Cisco Systems.

Error Message:

```
%TR-3-SETGRPFAIL: Unit [dec], set group address failed (code [hex])
```

Explanation:

An internal software error occurred.

Recommended Action:

If message recurs, contact Cisco Systems.

Error Message:

```
%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-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 non-standard 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 A-4.

Table A-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	Remove request received	Yes
0x0080	Counter overflow	No
0x0040	Single station	No
0x0020	Ring recovery	No

Recommended Action:

Check the ring for the indicated condition.

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-UNKNOWNT2M 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.

VINES Error Messages

Error Message:

```
%VINES-2-NEIGHBOR vines_update called with null neighbor
```

Explanation:

An internal software error has occurred.

Recommended Action:

If this message recurs, contact Cisco Systems for assistance.

Error Message:

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

Explanation:

An internal software error has occurred.

Recommended Action:

If this message recurs, contact Cisco Systems for assistance.

X.25 Error Messages

Error Message:

```
%X25-2-BADLIST Regular expression access check with bad list [dec]

%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-REWRITE Error rewriting called address in X25-Switch

%X25-3-SPURD1 Spurious D1 timer wakeup on LCI [dec]
```

Explanation:

An internal software error has occurred.

Recommended Action:

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

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