

# System Error Messages

**Cisco Internetwork Operating System  
Release 10.3**



© Digital Equipment Corporation 1995.  
All Rights Reserved.

The products and specifications, configurations, and other technical information regarding the products contained in this manual are subject to change without notice. All statements, technical information, and recommendations contained in this manual are believed to be accurate and reliable but are presented without warranty of any kind, express or implied, and users must take full responsibility for their application of any products specified in this manual.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual for this device, may cause interference to radio communications. This equipment has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case users at their own expense will be required to take whatever measures may be required to correct the interference.

Possession, use, or copying of the software described in this publication is authorized only pursuant to a valid written license from Digital or an authorized sublicensor.

Digital Equipment Corporation makes no representations that the use of its products in the manner described in this publication will not infringe on existing or future patent rights, nor do the descriptions contained in this publication imply the granting of licenses to make, use, or sell equipment or software in accordance with the description.

The following are trademarks of Digital Equipment Corporation:  
DDCMP, DEC, DECnet, DECNIS, DECserver, DECsystem,  
DECwindows, Digital, DNA, OpenVMS, ULTRIX, VAX, VAXstation,  
VMS, VMScluster, and the DIGITAL logo.

Portions of this document is used with permission of Cisco Systems, Incorporated. Copyright © 1990 - 1995, Cisco Systems, Inc.

---

The following third-party software may be included with your product and will be subject to the software license agreement:

CiscoWorks software and documentation are based in part on HP OpenView under license from the Hewlett-Packard Company. HP OpenView is a trademark of the Hewlett-Packard Company. Copyright © 1992, 1993 Hewlett-Packard Company.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

Network Time Protocol (NTP). Copyright © 1992, David L. Mills. The University of Delaware makes no representations about the suitability of this software for any purpose.

Point-to-Point Protocol. Copyright © 1989, Carnegie-Mellon University. All rights reserved. The name of the University may not be used to endorse or promote products derived from this software without specific prior written permission.

The Cisco implementation of TN3270 is an adaptation of the tn3270, curses, and termcap programs developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981-1988, Regents of the University of California.

Cisco incorporates Fastmac software in some Token Ring products. Fastmac software is licensed to Cisco by Madge Networks Limited.

XRemote is a trademark of Network Computing Devices, Inc. Copyright © 1989, Network Computing Devices, Inc., Mountain View, California. NCD makes no representations about the suitability of this software for any purpose.

---

The X Window System is a trademark of the Massachusetts Institute of Technology. Copyright © 1987, Digital Equipment Corporation, Maynard, Massachusetts, and the Massachusetts Institute of Technology, Cambridge, Massachusetts. All rights reserved.

THESE MANUALS AND THE SOFTWARE OF THE ABOVE-LISTED SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. DIGITAL AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL DIGITAL OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF DIGITAL HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Notice of Restricted Rights:

Use, duplication, or disclosure by the Government is subject to restrictions as set forth in subparagraph (c) of the Commercial Computer Software - Restricted Rights clause at FAR §52.227-19 and subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS §252.227-7013. The information in this manual is subject to change without notice.

Access Without Compromise, Catalyst, CD-PAC, CiscoFusion, CiscoWorks, HyperSwitch, Internetwork Operating System, IOS, Netscape, Point and Click Internetworking, SMARTnet *The Packet*, UniverCD, Workgroup Director, and Workgroup Stack are trademarks, and Cisco, Cisco Systems and the Cisco logo are registered trademarks of Cisco Systems, Inc. All other products or services mentioned in these documents are the trademarks, service marks, registered trademarks, or registered service marks of their respective owners.

---

# Table of Contents

Introduction .....	1
How to Read System Error Messages .....	1
How This Guide Is Organized.....	2
Error Message Traceback Reports .....	7
System Error Messages .....	9
ALIGN Error Messages .....	9
ARAP Error Messages .....	11
AT Error Messages .....	13
BGP Error Messages .....	33
BRI Error Messages .....	33
CBus Error Messages .....	35
CIP Error Messages.....	44
CIP-ADAPTER Error Messages.....	46
CIP-BSQ Error Messages .....	51
CIP-CBUS_ATTEN Error Message.....	52
CIP-CBUS_WRITE Error Messages .....	52
CIP-CCA Error Messages .....	54
CIP-CLAW Error Messages .....	62
CIP-CONFIG Error Messages .....	66
CIP-DIAG Error Message.....	71
CIP-DMA Error Messages .....	73
CIP-GET_DATA Error Message .....	75
CIP-INT Error Messages.....	75
CIP-LOVE Error Message .....	77
CIP-MEMD Error Message .....	77

CIP-NEVADA Error Messages .....	78
CIP-SCB Error Message .....	80
CIP-SCHED Error Messages .....	80
CIP-SLC Error Messages .....	83
CLNS Error Messages .....	84
COMP Error Messages .....	85
CONTROLLER Error Messages .....	86
CSC2-4 Error Message .....	87
DBUS Error Messages .....	87
DLSW Error Messages .....	91
DNET Error Messages .....	99
DSPU Error Messages .....	100
DUAL Error Messages.....	107
EGP Error Messages .....	108
ENV Error Messages .....	109
ENVM Error Messages .....	110
FDDI Error Messages .....	112
FDDISTAT Error Message .....	113
FR Error Message .....	114
GRIP Error Messages.....	114
HD Error Messages .....	115
IGRP Error Message .....	117
IP Error Messages .....	117
IPRT Error Messages .....	118
IPX Error Messages .....	119
LANCE Error Messages .....	121
LANMGR Error Messages .....	123

**Table of Contents**

LAPB Error Messages.....	124
LAT Error Messages .....	127
LINEPROTO Error Message .....	128
LINK Error Messages .....	128
MAILBOX Error Messages .....	132
MCI Error Messages .....	134
MK5025 Error Messages .....	137
NIM Error Messages .....	139
OIR Error Messages .....	140
OSPF Error Messages .....	141
PAD Error Messages.....	145
PARSER Error Messages.....	146
PPP Error Messages .....	147
QLLC Error Messages .....	148
RCMD Error Messages .....	152
REGEXP Error Message.....	154
REMIF Error Messages.....	154
RIP Error Message .....	156
RSRB Error Messages.....	156
SDLC Error Messages.....	160
SDLLC Error Messages .....	164
SEC Error Messages .....	165
SLIP Error Messages.....	166
SNMP Error Messages.....	166
SSE Error Messages .....	167
STANDBY Error Messages.....	170
STUN Error Messages .....	171

SUBSYS Error Messages.....	175
SYS Error Messages .....	177
TAC Error Messages.....	192
TCP Error Messages .....	193
TMQ Error Messages.....	193
TN Error Messages .....	193
TR Error Messages.....	194
TUN Error Messages .....	207
UCODE Error Messages.....	209
UTIL Error Messages.....	211
VINES Error Messages.....	212
X25 Error Messages.....	217
XNS Error Messages.....	222
Miscellaneous Error Messages .....	223

**Table of Contents**

---



## List of Tables

<b>Table 1</b>	Facility Codes .....	3
<b>Table 2</b>	Error Message Severity Levels .....	6
<b>Table 3</b>	Representation of Variable Fields in Error Messages .....	6
<b>Table 4</b>	Token Ring Status Codes.....	206
<b>Table 5</b>	Stack Trace Fields.....	224



# Introduction

---

This publication lists and describes system error messages for the router and communication server products, and the protocol translator feature. The system software sends these error messages to the console (and, optionally, to a logging server on another system) during operation. Not all system error messages indicate problems with your system. Some are purely informational, while others may help diagnose problems with communications lines, internal hardware, or the system software.

## How to Read System Error Messages

System error messages begin with a percent sign and are structured as follows:

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

**FACILITY** is a code consisting of two or more uppercase letters that indicate the facility to which the message refers. A facility can be a hard-ware device, a protocol, or a module of the system software. Table 1 lists the system facilities codes.

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

**MNEMONIC** is a code that uniquely identifies the error message.

**Message-text** is a text string describing the condition. This portion of the message sometimes contains detailed information about the event, including terminal port numbers, network addresses, or addresses that correspond to locations in the system 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]. Table 3 lists the representations of variable fields and the type of information in them.

The following is a sample system error message:

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

## How This Guide Is Organized

The “System Error Messages” main section provides descriptions of error messages organized according to the particular system facility that produces the messages. Within each system facility section, messages are listed alphabetically by mnemonic. Each error message is followed by an explanation and a recommended action. 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.

The last main section, “Miscellaneous Error Messages,” covers error messages that cannot be categorized as system error messages because they appear when the system image crashes. System error messages appear only when the system remains operational.

The index of system error messages is alphabetized by facility-severity-mnemonic.

**Table 1 Facility Codes**

<b>Code</b>	<b>Facility</b>
ALIGN	Memory optimization in RISC processor
ARAP	Apple Remote Access Protocol
AT	AppleTalk
BGP	Border Gateway Protocol
BRI	ISDN Basic Rate Interface
CBUS	ciscoBus controller
CIP FACILITY:	Channel Interface Processor
ADAPTER	Adapter processing
BSQ	Buffer status queue processing
CBUS_ATTEN	ciscoBus controller statistics
CBUS_WRITE	ciscoBus controller write support
CCA	Channel card adapter
CLAW	Common Link Access to Workstation
CONFIG	Configuration processing
DIAG	Diagnostic processing
DMA	Direct memory access
INT	Interrupt handler
LOVE	CIP-to-Router statistics
MEMD	Memory device
NEVADA	Internal controller
SCB	Storage control block
SCHED	Multitasking scheduler
SLC	Serial link controller
CLNS	OSI Connectionless Network Services
COMP	Point-to-point compression
CONTROLLER	Controller
CSC2	CSC2/CSC3 CPU cards
DBUS	dBus

<b>Code</b>	<b>Facility</b>
DLSW	Data Link Switching
DNET	DECnet
DSPU	Downstream physical unit
DUAL	Enhanced Interior Gateway Routing Protocol
EGP	Exterior Gateway Protocol
ENV	Environmental monitor card for AGS+
ENVM	Environmental Monitor for Cisco 7000 Series
FDDI	Fiber Distributed Data Interface
FDDISTAT	FDDI state
FR	Frame Relay
GRIP	XNS Routing Protocol
HD	HD64570 serial controller
IGRP	Interior Gateway Routing Protocol
IP	Internet Protocol
IPRT	Internet Protocol routing
IPX	Internetwork Packet Exchange Protocol
LANCE	STS-10X or IGS Ethernet interface
LANMGR	IBM LAN Network Manager
LAPB	X.25 Link Access Protocol, Balanced
LAT	DEC LAT (Local Area Transport)
LINEPROTO	Line Protocol
LINK	Data link
MAILBOX	ChipCom mailbox support
MCI	Multipoint Communications Interface
MK5	MK5025 serial controller
NIM	Network interface module
OIR	Online insertion and removal
OSPF	Open Shortest Path First
PAD	X.25 packet assembler/disassembler

---

## **Introduction**

<b>Code</b>	<b>Facility</b>
PARSER	Parser
PPP	Point-to-Point Protocol
QLLC	Qualified Logical Link Control
RCMD	Remote commands
REGEXP	Regular expression parser
REMIF	Remote interface
RIP	IP Routing Information Protocol
RSRB	Remote source-routing bridge
SDLC	Synchronous Data Link Control
SDLLC	SDLC/LLC2 translation
SEC	IP security
SLIP	Serial Line IP
SNMP	Simple Network Management Protocol
SSE	Silicon switching engine
STANDBY	Hot Standby Router protocol
STUN	Serial tunneling
SUBSYS	Software subsystems
SYS	Operating system
TAC	Terminal Access Control protocol
TCP	Transmission Control Protocol
TMQ	Inbound Terminal Port Queuing
TN	Telnet
TR	Token Ring
TUN	Tunnel
UCODE	Microcode
UTIL	Utility
VINES	Banyan VINES
X25	X.25
XNS	Xerox Network Services

**Table 2 Error Message Severity Levels**

Level	Description
0 – emergency	System unusable
1 – alert	Immediate action needed
2 – critical	Critical condition
3 – error	Error condition
4 – warning	Warning condition
5 – notification	Normal but significant condition
6 – informational	Informational message only
7 – debugging	Appears during debugging only

Error message severity levels correspond to the keywords assigned by the **logging** global configuration commands that define where and at what level these messages appear. The default is to log messages to the console at the debugging level (7). For more information, see the system configuration chapter and descriptions of the **logging** command in the appropriate configuration guide and command reference publications.

**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)
[v-name]	VINES name; or number (hex or decimal)

## Introduction



## **Error Message Traceback Reports**

Some messages describe internal errors and contain traceback information. This information is very important and should be included when you report a problem to your technical support representative.

The following sample message includes traceback information:

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



# System Error Messages

---

## ALIGN Error Messages

This facility controls a feature in the RISC-processor-based Cisco products that identifies software in need of memory use optimization.

### Error Message

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

**Explanation** A software component within the router has been identified as needing memory optimization.

**Recommended Action** Report this message to your technical support representative.

### Error Message

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

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

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

### Error Message

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

## ARAP Error Messages

Apple Remote Access Protocol error messages

### Error Message

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

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

**Recommended Action** No action is required.

### Error Message

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

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

**Recommended Action** No action is required.

### Error Message

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

**Explanation** A user has been disconnected from ARAP at an unexpected time. This may be due to modems dropping, server error, client problems, or any number of other difficulties.

**Recommended Action** Possibly correlate with user problem reports.

### Error Message

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

**Explanation** Internal data structures have become corrupted.

**Recommended Action** Check for abnormally high CPU usage.

**Error Message**

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

**Explanation** The ARAP client was denied access, probably due to a configuration problem on the server. Error message should indicate the problem. Denials due to bad passwords don't show up here.

**Recommended Action** Investigate problem reported in error message.

**Error Message**

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

**Explanation** ARAP was unable to obtain a buffer for an incoming packet.

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

**Error Message**

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

**Explanation** The startup negotiation between a client and the ARAP server has fallen out of order. If this is sporadic, it is indicative of line noise.

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

**Error Message**

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

**Explanation** TACACS authentication has failed because extended TACACS has not been configured.

**Recommended Action** Configure extended TACACS.

**System Error Messages**

---

**Error Message**

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

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

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

**Error Message**

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

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

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

## AT Error Messages

AppleTalk error messages

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**System Error Messages**

---



**Error Message**

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

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

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

**Error Message**

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

**Explanation** The system has not heard about a route within the required time-out period. Therefore, the route has been marked as bad. This may mean that a network has become unreachable for some reason—perhaps a broken connection. This message does not necessarily reflect an error condition.

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**System Error Messages**

---

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

**Explanation** A route has aged out of the AppleTalk internetwork.

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

**Recommended Action** If the port has not been intentionally disabled, this message may reflect a hardware problem. If so, repair or replace the controller.

**Error Message**

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

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

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

**Error Message**

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

**Explanation** An AppleTalk port that was previously shut down has been restarted.

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

**System Error Messages**

---

**Error Message**

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

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

**Recommended Action** Enter a valid command.

**Error Message**

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

**Explanation** A peer router has become unreachable.

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

**Error Message**

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

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

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

**Recommended Action** Advisory message. No action required.

**Error Message**

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

**Explanation** If the **appletalk event-logging** command is configured, this message appears on the console when a MacIP server is no longer operational for any reason. MacIP servers shut down in response to MacIP configuration changes or errors, or a change in the condition or configuration of an AppleTalk or IP interface for which the MacIP server

is providing service. An AppleTalk zone of the MacIP server replaces ZONE-NAME. The MacIP server's configured IP address replaces X.X.X.X.

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

**Error Message**

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

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

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

**Error Message**

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

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

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

---

**System Error Messages**



**Error Message**

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

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

**Recommended Action** Correct the problem at the other router.

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

**Recommended Action** Reconfigure the applicable routers.

**Error Message**

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

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

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

**Error Message**

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

**Explanation** The router discovered a new AppleTalk router.

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

**Error Message**

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

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

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

**Error Message**

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

**Explanation** A new AppleTalk zone has been created.

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

**System Error Messages**

---

**Error Message**

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

**Explanation** No free node could be found on the interface.

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

**Error Message**

%AT-3-NOBESTPATH: Could not compute best path for network [atalk\_net]

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

%AT-3-NOSUCHNBR: No such neighbor, [atalk\_net]

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

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

**Error Message**

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

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

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

**Error Message**

%AT-3-NOTRUNNING: AppleTalk not running

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**System Error Messages**

---

**Error Message**

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

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

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

**Error Message**

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

**Explanation** A path has aged out of the AppleTalk network.

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

**Error Message**

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

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

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

**Error Message**

%AT-4-PATHREJECTED: AURP path [atalk\_net] rejected; conflict detected

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

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

**Error Message**

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

**Explanation** A name registration call is being performed.

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**System Error Messages**

---



**Error Message**

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

**Explanation** The state of a path has changed.

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

**Error Message**

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

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

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

**Error Message**

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

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

**Recommended Action** Reconfigure the routers so they are all consistent.

**Error Message**

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

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

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

**Error Message**

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

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

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

## BGP Error Messages

Border Gateway Protocol error messages

### Error Message

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

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

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

### Error Message

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

**Explanation** Initialization of Radix tree could not be accomplished because of a low memory condition.

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

## BRI Error Messages

ISDN Basic Rate Interface error messages

### Error Message

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

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

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

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

**Error Message**

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

**Explanation** The hardware failed to initialize correctly.

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

**Error Message**

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

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

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

**Error Message**

%BRI-3-ODDSTART: Interface [chars]

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

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

**Error Message**

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

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

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

**System Error Messages**

---

**Error Message**

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

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

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

## CBus Error Messages

ciscoBus controller error messages

**Error Message**

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

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

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

%CBUS-3-AIPRSETU: Unit [dec], Error ([hex]) [chars] - aip\_reset()

**Explanation** A software error has occurred.

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

%CBUS-3-CBUSBCE: Failed to select a BCE, response [hex]  
- cbus\_bce\_update\_ifa()

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

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

**Error Message**

%CBUS-3-CBUSBCEPERM: Failed to select a BCE, response  
[hex] - cbus\_bce\_permissions\_update()

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

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

**Error Message**

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

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

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

**System Error Messages**

---

**Error Message**

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

**Explanation** A hardware component failed an internal diagnostic test.

**Recommended Action** Replace the malfunctioning device.

**Error Message**

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

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

**Recommended Action** Issue a **clear interface** command. If this message recurs, call your technical support representative for assistance.

**Error Message**

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

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

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

**Error Message**

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

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

**Recommended Action** Issue a **clear interface** command. If this message recurs, call your technical support representative for assistance.

**Error Message**

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

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

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

**Error Message**

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

**Explanation** The Token Ring interface failed its memory diagnostic tests.

**Recommended Action** Issue a **clear interface** command. If this message recurs, call your technical support representative for assistance.

**Error Message**

%CBUS-3-CTRRESET: Unit [dec], Error (%-04x) [char] -  
cbus\_token\_reset()

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

**Recommended Action** Issue a **clear interface** command. If this message recurs, call your technical support representative for assistance.

**Error Message**

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

**Explanation** The CTR microcode detected an unrecoverable error.

**Recommended Action** Issue a **clear interface** command. If this message recurs, call your technical support representative for assistance.

**System Error Messages**

---



**Error Message**

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

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

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

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

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

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

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

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

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

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

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

**Error Message**

%CBUS-3-DAUGHTER\_NO\_RSP: Unit [dec], daughter [dec],  
not responding [hex] - disabled

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

Unit [dec] (ranges 0-14):

Indicates the Multibus jumper setting for the ciscoBus controller.

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

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

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

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

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

**Error Message**

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

%CBUS-3-FDDIRSETU: Unit [dec], Error ([hex])  
[chars] - fddi\_reset()

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

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

**System Error Messages**

**Error Message**

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

**Explanation** A Fast Serial Interface Processor (FSIP) has not responded to a reset request from the route processor.

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

**Error Message**

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

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

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

**Error Message**

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

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

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

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

**Error Message**

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

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

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

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

**Error Message**

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

**Explanation** Output hung on a ciscoBus Ethernet interface.

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

**Error Message**

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

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

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

**Error Message**

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

**Explanation** The controller type was derived from a hardware probe. The controller number indicates the ciscoBus relative slot number. The most likely problem is a missing or invalid MAC address cookie ROM. A less likely explanation is corrupted MEMD after the memd self-tests.

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

**Error Message**

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

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

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

**Error Message**

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

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

**Recommended Action** If this message recurs, call your technical support representative for assistance. You might need to repair or replace the controller.

**Error Message**

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

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

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

**Error Message**

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

**Explanation** A hardware component failed an internal diagnostic test.

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

**Error Message**

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

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

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

## CIP Error Messages

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

---

**System Error Messages**

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

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

For simplicity, CIP error messages are organized into sections alphabetically by facility subcode. Within each CIP section, messages appear alphabetically by mnemonic. CIP and slot number are not shown in the error message listing.

## CIP-ADAPTER Error Messages

CIP error messages for the adapter task

### Error Message

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

**Explanation** The user has used the test cbus command to request a particular adapter diagnostic to be run. This message is to inform the user that the diagnostic routine has started.

**Recommended Action** Wait for the next message.

### Error Message

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

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

**Recommended Action** Report this message to your technical support representative.

### Error Message

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

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

**Recommended Action** Report this message to your technical support representative.

---

## System Error Messages



**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** None.

**Error Message**

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

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

**Recommended Action** Reenter the command with a valid diagnostic number.

**Error Message**

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

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

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

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**System Error Messages**

---

**Error Message**

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

**Explanation** This indicates that an error has occurred on the adapter. The information displayed will assist development in determining the nature of the error.

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

**Explanation** This message is used when displaying logout information. Its purpose is to avoid printing duplicate data.

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

%ADAPTER-0-START\_FAIL: Diagnostics failed for port [dec], start request ignored.

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

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

**Error Message**

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

**Explanation** The wrap plug has been removed, causing the wrap diagnostics to terminate.

**Recommended Action** No action is required.

**System Error Messages**

---

**Error Message**

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

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

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

## CIP-BSQ Error Messages

CIP error messages for Buffer Status Queue processing

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

## CIP-CBUS\_ATTEN Error Message

CIP error messages relating to the CBUS\_ATTEN routine, the facility that receives configuration requests and gathers statistics

### Error Message

%CBUS\_ATTEN-3-BADADDR: Bad memory address [hex]  
requested

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

**Recommended Action** Report this error to your technical support representative.

## CIP-CBUS\_WRITE Error Messages

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

### Error Message

%CBUS\_WRITE-3-BADTYPE: Invalid write type [dec]

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

**Recommended Action** Report this error to your technical support representative.

### Error Message

%CBUS\_WRITE-3-INVALID: Valid bit not set in IO  
exception register [hex]

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

**Recommended Action** Report this error to your technical support representative.

## System Error Messages

**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

**Error Message**

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

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

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

## CIP-CCA Error Messages

CIP error messages for channel card adapter processing

### Error Message

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

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

**Recommended Action** Normal processing will resume, but it would be useful for development to know that this message has occurred. Report this message to your technical support representative.

### Error Message

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

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

**Recommended Action** Report this message to your technical support representative.

### Error Message

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

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

**Recommended Action** Report this message to your technical support representative.



**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** The CIP has performed recovery, but development should be notified of the problem. Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** The CIP has performed recovery, but development should be notified of the problem. Report this message to your technical support representative.

**Error Message**

%CCA-3-REQUEST\_STATUS: Request status received for undefined path [hex]

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

**Recommended Action** The CIP has performed recovery, but development should be notified of the problem. Report this message to your technical support representative.

**Error Message**

%CCA-3-RESET\_PATH: Reset received for undefined path [hex]

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

**Recommended Action** The CIP has performed recovery, but development should be notified of the problem. Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** The CIP has performed recovery, but development should be notified of the problem. Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** The CIP has performed recovery, but development should be notified of the problem. Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** The CIP has performed recovery, but development should be notified of the problem. Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** The CIP has performed recovery, but development should be notified of the problem. Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** The CIP has performed recovery, but development should be notified of the problem. Report this message to your technical support representative.

**System Error Messages**

---

**Error Message**

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

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

**Recommended Action** The CIP has performed recovery, but development should be notified of the problem. Report this message to your technical support representative.

**Error Message**

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

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

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

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

## CIP-CLAW Error Messages

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

### Error Message

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

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

**Recommended Action** Correct the host and/or router configuration.

### Error Message

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

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

**Recommended Action** Correct the host and/or router configuration.

### Error Message

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

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

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

---

## System Error Messages



**Error Message**

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

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

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

**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

**Error Message**

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

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

**Recommended Action** Correct the host and/or router configuration.

**Error Message**

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

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

**Recommended Action** Correct the host and/or router configuration.

**Error Message**

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

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

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

**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

**System Error Messages**

---

**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

**Error Message**

`%CLAW-6-NOTXBUF: Unable to allocate txbuf`

**Explanation** No available transmit buffers exist, but the CLAW connection has not reached its transmit buffer limit. The packet has been dropped.

**Recommended Action** Report this error to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

## CIP-CONFIG Error Messages

CIP error messages related to the configuration facility

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

## System Error Messages

---

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

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

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

**Explanation** A packet has been queued for the CIP with an invalid virtual circuit number.

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

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

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

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

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

**Error Message**

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

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

**Recommended Action** Configure fewer paths.

**Error Message**

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

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

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

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**System Error Messages**

---



**Error Message**

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

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

**Recommended Action** Configure fewer devices.

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

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

**CIP-DIAG Error Message**

CIP error message for diagnostic processing

**Error Message**

%DIAG-6-BADCODE: Invalid request code [dec] to  
run\_diag

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

**Recommended Action** Report this message to your technical support representative.

## CIP-DMA Error Messages

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

### **Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

### **Error Message**

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

**Explanation** A parity error was detected on the CBUS during a data transfer. The packet has been dropped.

**Recommended Action** Report this error to your technical support representative.

### **Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

**Error Message**

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

**Explanation** The CBUS did not respond to the DMA controller within 10 microseconds (10 $\mu$ s). The packet has been dropped.

**Recommended Action** Report this error to your technical support representative.

**Error Message**

`%DMA-0-NOXFERR: No transfer pending on DMA interrupt`

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

**Recommended Action** Report this error to your technical support representative.

## CIP-GET\_DATA Error Message

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

### Error Message

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

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

**Recommended Action** Report this error to your technical support representative.

## CIP-INT Error Messages

CIP error messages for the interrupt handler interface

### Error Message

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

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

**Recommended Action** Report this error to customer engineering.

### Error Message

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

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

**Recommended Action** Report this error to customer engineering.

**Error Message**

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

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

**Recommended Action** Report this error to customer engineering.

**Error Message**

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

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

**Recommended Action** Report this error to customer engineering.

**Error Message**

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

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

**Recommended Action** Report this error to customer engineering.

**Error Message**

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

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

**Recommended Action** Report this error to customer engineering.

**Error Message**

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

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

**Recommended Action** Report this error to customer engineering.

**System Error Messages**

---

**Error Message**

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

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

**Recommended Action** Report this error to customer engineering.

**CIP-LOVE Error Message**

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

**Error Message**

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

**Explanation** An attempt was made to transfer statistics to the RP. The DMA routines returned the wrong transfer request. The CIP has recovered.

**Recommended Action** Report this error to your technical support representative.

**CIP-MEMD Error Message**

CIP error message related to the MEMD facility

**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

## CIP-NEVADA Error Messages

Error messages related to the CIP interrupt controller

### Error Message

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

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

**Recommended Action** Report this error to your technical support representative.

### Error Message

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

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

**Recommended Action** Report this error to your technical support representative.

### Error Message

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

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

**Recommended Action** Report this error to your technical support representative.



**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

## CIP-SCB Error Message

CIP error messages related to the storage control block

### Error Message

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

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

**Recommended Action** Report this message to your technical support representative.

## CIP-SCHED Error Messages

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

### Error Message

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

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

**Recommended Action** Report this error to your technical support representative.

### Error Message

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

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

**Recommended Action** Report this error to your technical support representative.

## System Error Messages

---

**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this error to your technical support representative.

## CIP-SLC Error Messages

CIP error messages related to the serial link controller

### Error Message

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

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

**Recommended Action** Report this message to your technical support representative.

### Error Message

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

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

**Recommended Action** Report this message to your technical support representative.

### Error Message

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

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

**Recommended Action** Report this message to your technical support representative.

### Error Message

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

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

**Recommended Action** Report this message to your technical support representative.

**Error Message**

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

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

**Recommended Action** Report this message to your technical support representative.

## CLNS Error Messages

OSI Connectionless Network Service error messages

**Error Message**

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

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

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

**Error Message**

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

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

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

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

## System Error Messages

**Error Message**

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

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

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

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

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

## COMP Error Messages

Point-to-point compression error messages

**Error Message**

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

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

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

**Error Message**

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

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

**Recommended Action** Configure additional large and big buffers.

**Error Message**

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

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

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

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

**Recommended Action** Configure both interfaces for predictor compression.

## CONTROLLER Error Messages

Controller error messages

**Error Message**

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

**Explanation** A controller has stopped responding to commands over the cBus, so it has been put into shutdown mode.

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

**Error Message**

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

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

**Recommended Action** No action required.

## System Error Messages

---



**Error Message**

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

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

**Recommended Action** No action required.

**CSC2-4 Error Message**

CPU card error message

**Error Message**

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

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

**Recommended Action** Service the console serial port hardware.

**DBUS Error Messages**

dBus error messages

**Error Message**

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

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

**Recommended Action** Call your technical support representative for a replacement.

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

**Recommended Action** Reinstall the processor or download the microcode. If this message recurs, call your technical support representative for assistance. Currently no boards report this error.

**Error Message**

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

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

**Recommended Action** Replace the RP1 EEPROM. Call your technical support representative for assistance.

**System Error Messages**

---

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

**Explanation** Writable Control Store (WCS) is the set of devices on each interface processor that contains the running microcode. It can be loaded either from the ROM on the interface processor or from the system by using the downloadable microcode facility. In this message, a

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

## DLSW Error Messages

Data Link Switching error messages

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**System Error Messages**

---

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

```
%DLSWC-3-BADPEEROP: bad peer op in peer_to_core -dec]
```

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**System Error Messages**

---



**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

```
%DLSWC-3-FSMACTION: [chars]
```

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

%DLSWC-3-NOBUFF: No buffer

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**System Error Messages**

---

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

**Error Message**

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

**Explanation** A Data Link Switching system error has occurred.

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

## DNET Error Messages

DECnet error messages

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

## DSPU Error Messages

Downstream physical unit error messages

**Error Message**

%DSPU-3-ActpuNegResponse: ACTPU Neg rsp received from PU [chars]

**Explanation** Remote PU has rejected the router's request for an SSCP-PU session.

**Recommended Action** Verify PU configuration parameters at the router and at the remote PU. Determine whether the problem exists at the remote PU, and correct it. If the problem persists, call your technical support representative for assistance.

## System Error Messages

---

**Error Message**

%DSPU-3-CLSIBadAdptCorr:CLSI bad Adaptor correlator,  
header= [chars]

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

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

**Error Message**

%DSPU-3-CLSIBadIdentifier: CLSI bad identifier,  
header= [chars]

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

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

**Error Message**

%DSPU-3-CLSIBadIdentifierType: CLSI bad identifier  
type, header= [chars]

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

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

**Error Message**

%DSPU-3-CLSIBadLength: CLSI bad length, header=  
[chars]

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

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

**Error Message**

%DSPU-3-CLSIBadPrimitiveCmd: CLSI bad primitive command, header= [chars]

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

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

**Error Message**

%DSPU-3-CLSIBadPrimitiveType: CLSI bad primitive type, header= [chars]

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

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

**Error Message**

%DSPU-3-CLSIBadReturnCode:CLSI bad return code: %d, header= [chars]

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

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

**Error Message**

%DSPU-3-CLSIUnexpctActSapCnf:CLSI unexpected ActivateSapCnf, header= [chars]

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

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

**System Error Messages**

---



**Error Message**

```
%DSPU-3-CLSIUnexpctDeactSapCnf:CLSI unexpected  
DeactivateSapCnf, header= [chars]
```

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

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

**Error Message**

```
%DSPU-3-CLSIUnexpctEnableCnf:CLSI  
unexpectedEnableCnf, header= [chars]
```

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

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

**Error Message**

```
%DSPU-3-CLSIUnexpctIdStnInd: CLSI unexpected IdStnInd,  
header= [chars]
```

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

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

**Error Message**

```
%DSPU-3-LSConnInFailed: Connect in from remote MAC  
[chars] failed
```

**Explanation** Connection with remote station could not be established.

**Recommended Action** Verify configuration parameters at the router and at the remote station. Determine whether the router is configured to accept connectIn from this remote station.

**Error Message**

%DSPU-3-LSConnInFailedNoMem: Connect in from remote MAC [chars] failed; insufficient memory

**Explanation** Connection with the remote station could not be established because of insufficient memory in the router.

**Recommended Action** Correct low memory problem in the router. If the problem persists, call your technical support representative for assistance.

**Error Message**

%DSPU-3-LSConnInFromHostFailed: Connect in from host [chars] with remote MAC [chars] failed

**Explanation** Connection with the remote host could not be established.

**Recommended Action** Verify host configuration parameters at the router and at the host. Determine whether the router is configured to accept connectIn from this host.

**Error Message**

%DSPU-3-LSConnInFromPuFailed: Connect in from pu [chars] with remote MAC [chars] failed

**Explanation** Connection with the remote PU could not be established.

**Recommended Action** Verify PU configuration parameters at the router and at the remote PU. Determine whether the router is configured to accept connectIn from this remote PU.

**Error Message**

%DSPU-3-LSConnOutToHostFailed: Connect out to host [chars] failed

**Explanation** Connection with the remote host could not be established.

**Recommended Action** Verify host configuration parameters at the router and at the host. Determine whether the host is active and responding to connection requests.

**System Error Messages**

---

**Error Message**

```
%DSPU-3-LSConnOutToPuFailed:Connect out to pu [chars]  
failed
```

**Explanation** Connection with the remote PU could not be established.

**Recommended Action** Verify PU configuration parameters at the router and at the remote PU. Determine whether the remote PU is active and responding to connection requests.

**Error Message**

```
%DSPU-3-LSInvalidMaxIFrame: Connection attempt failed  
from XID= [chars], Invalid MaxIFrame= [dec]
```

**Explanation** An invalid MaxIFrame value in XID was received from the remote station; connection with remote station could not be established.

**Recommended Action** Correct link station configuration at the remote station.

**Error Message**

```
%DSPU-3-LSInvalidWindowSize:Connection attempt failed  
from XID= [chars], Invalid WindowSize= [dec]
```

**Explanation** An invalid WindowSize value in XID was received from the remote station; connection with remote station could not be established.

**Recommended Action** Correct link station configuration at the remote station.

**Error Message**

```
%DSPU-3-LSNoACTPUCapability:Connection attempt failed  
from XID= [chars], ACTPU not supported");
```

**Explanation** The remote station has not requested PU 2.0 activation; connection with remote station terminated.

**Recommended Action** Correct link station configuration parameters at the remote station to request a system services control point (SSCP)-PU session with the router.

**Error Message**

%DSPU-3-LSXIDNegotiationError: XID received with CV 0x22, bad byte= [dec], bad bit= [dec]

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

**Recommended Action** Determine which field in XID3 (from CV 0x22 byte/bit info) is rejected by the remote station, and correct link station configuration parameters at either the router or the remote station.

**Error Message**

%DSPU-3-NotifyNegRsp: LU [dec] received a Notify Neg Rsp from host [chars]

**Explanation** Remote host has rejected the router's request to activate/deactivate an SSCP-LU session.

**Recommended Action** Verify host configuration parameters at the router and at the remote host. Determine whether the problem exists at the remote host and correct it. If the problem persists, call your technical support representative for assistance.

**Error Message**

%DSPU-3-SnaBadData: Bad SNA data received from PU [chars], data= [chars]

**Explanation** Unrecognized SNA data was received from the remote PU.

**Recommended Action** Correct the problem at the remote PU. If the problem persists, call your technical support representative for assistance.

**Error Message**

%DSPU-3-UnknownXid:XID Format not supported, XID=[chars]

**Explanation** Unsupported XID received from the remote station; connection with remote station could not be established.

**Recommended Action** Configure the remote station to send supported XID (if possible). Supported XID formats are  
XID Format 0  
XID Format 3

## DUAL Error Messages

Enhanced Interior Gateway Protocol error messages

**Error Message**

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

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

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

**Error Message**

%DUAL-3-LINKSEXIST: Interface [chars] is going down and [dec] links exist

**Explanation** An interface is going down or is being removed from routing through IGRP, but not all links (neighbors) have been removed from the topology table.

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

**Error Message**

%DUAL-3-NOHANDLE: Handle [dec] is not allocated in pool.

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

## EGP Error Messages

Exterior Gateway Protocol error messages

**Error Message**

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

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

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

**System Error Messages**

---

**Error Message**

%EGP-3-TOOBIG: Insufficient ([dec]) buffering for update message

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

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

## ENV Error Messages

Environmental monitor card error messages for AGS+

**Error Message**

%ENV-2-FLOW: Air flow appears marginal.

**Explanation** A temperature reading indicates poor air flow.

**Recommended Action** Attempt to resolve the air flow problem. If the problem is not resolved, call your technical support representative for assistance.

**Error Message**

%ENV-1-SHUTDOWN: Environmental Monitor initiated shutdown.

**Explanation** One of the environmental measurements has reached SHUTDOWN status. The system is about to shut down the processor to prevent damage to the hardware.

**Recommended Action** Attempt to resolve the temperature problem. If the problem is not resolved, call your technical support representative for assistance.

**Error Message**

%ENV-2-TEMP: Ambient temperature measured [chars].  
Shutdown at [chars]

**Explanation** The ENV card indicates the temperature it measured and the temperature at which it shuts down.

**Recommended Action** Attempt to resolve the temperature problem. If the problem is not resolved, call your technical support representative for assistance.

**Error Message**

%ENV-2-VOLTAGE: [chars] testpoint measured [chars].  
Shutdown margin is [chars].

**Explanation** The ENV card indicates which voltage it is measuring (for example, +5, +12, -5, -12), the amount of voltage that it measured, and the voltage at which the processor will shut down the system.

**Recommended Action** Attempt to resolve the voltage problem. If the problem is not resolved, call your technical support representative for assistance.

## ENVM Error Messages

Environmental monitor error messages for the Cisco 7000 series

**Error Message**

%ENVM-2-FAN: Fan array has failed, shutdown in [dec]  
minutes

**Explanation** There might be a hardware problem with the fan array. If the error condition continues for two minutes, the router automatically shuts down to prevent damage to router components.

**Recommended Action** If the system shuts down, replace the fan tray. Call your technical support representative for assistance.

## System Error Messages

---



**Error Message**

`%ENVM-1-SHUTDOWN: Environmental Monitor initiated shutdown`

**Explanation** The system has reached a SHUTDOWN temperature level, and the router is being shut down to avoid any damage.

**Recommended Action** Attempt to resolve the temperature problem. If the problem is not resolved, call your technical support representative for assistance.

**Error Message**

`%ENVM-2-SUPPLY: Power Supply is Non-Operational`

**Explanation** A power supply is not working or has not been turned on.

**Recommended Action** Check that the power supply is turned on; if it is turned on and still does not operate, call your technical support representative for assistance.

**Error Message**

`%ENVM-2-TEMP: [chars] temperature has reached [chars] level at [dec](C)`

**Explanation** The temperature parameter shown has reached a warning or critical level and is approaching or has approached a condition that is outside the acceptable range.

**Recommended Action** Attempt to resolve the temperature problem. If the problem is not resolved, call your technical support representative for assistance.

**Error Message**

`%ENVM-2-VOLTAGE: [chars] volts has reached [chars] level at [chars](V)`

**Explanation** The voltage parameter shown has reached a critical level and is now out of specification.

**Recommended Action** Verify the failure and call your technical support representative for repair or replacement.

## FDDI Error Messages

Fiber Distributed Data Interface error messages

### Error Message

`%FDDI-3-BADMUL: Unit [dec], Can't set FDDI mac address to hardware multicast address [enet]`

**Explanation** Part of your FDDI hardware has failed.

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

### Error Message

`%FDDI-3-BADSLLOT: Unit [dec], Slot [dec] does not exist`

**Explanation** The main processor detects an invalid slot location for one of the network interface cards. This should never happen.

**Recommended Action** Call your technical support representative about obtaining a replacement card.

### Error Message

`%FDDI-3-FDDIFAIL: Interface [chars], [chars], [chars] = [hex]`

**Explanation** The FDDI interface has failed.

**Recommended Action** Save the output of the error message and call your technical support representative for assistance.

### Error Message

`%FDDI-3-FDDIFAIL2: Interface [chars], [chars], [chars] = [hex], [chars] = [hex]`

**Explanation** The FDDI interface has failed. This is the second line of the preceding FDDIFAIL message. This line contains debug information.

**Recommended Action** Save the output of the error message and call your technical support representative for assistance.

## System Error Messages

---

**Error Message**

%FDDI-3-FDDIRSET: Interface [char], Error ([char]-04x)  
[chars] - fddi\_reset()

**Explanation** FDDI-related command execution failure.

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

**Error Message**

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

**Explanation** FDDI-related command execution failure.

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

**Error Message**

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

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

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

**FDDISTAT Error Message**

FDDI state error message

**Error Message**

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

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

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

## FR Error Message

Frame Relay error message

### Error Message

`%FR-5-DLCICHANGE: Interface [chars] - DLCI [dec] state changed to [chars]`

**Explanation** The state of the Frame Relay PVC specified by the DLCI has changed.

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

## GRIP Error Messages

XNS Routing Protocol error messages

### Error Message

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

**Explanation** An internal inconsistency has been detected in the XNS routing table structure.

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

### Error Message

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

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

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

## System Error Messages

---

## HD Error Messages

HD64570 serial controller error messages

### Error Message

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

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

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

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

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

### Error Message

%HD-1-BADPORT: [chars]

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

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

### Error Message

%HD-1-BADPORTADAPTER: [chars]

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

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

### Error Message

%HD-0-INITFAIL: Unit [dec], initialization timeout  
failure,csr[dec]=[hex]

**Explanation** The hardware failed to initialize correctly.

**Recommended Action** Repair or replace the controller.

**Error Message**

%HD-5-LINEFLAP: Unit [dec] excessive modem control changes

**Explanation** Too many modem control interrupts have been received. The port has been disabled to prevent excessive use of the CPU.

**Recommended Action** Check the cable on the serial port.

**Error Message**

%HD-1-MEMERR: Unit [dec], memory error, csr0 = [hex]

**Explanation** A network serial interface detected a hardware problem.

**Recommended Action** Repair or replace the controller.

**Error Message**

%HD-0-NOMEMORY: Unit [dec], no memory for [chars]

**Explanation** The requested operation could not be accomplished because of a low memory condition.

**Recommended Action** Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

**Error Message**

%HD-3-ODDSTART: Interface [chars], Odd datagram start = [hex], pak =[hex]

%HD-3-OUTENCAP: Unit [dec], bad output packet encapsulation: [hex]

**Explanation** An internal software error has occurred.

**Recommended Action** If either of these messages recur, call your technical support representative for assistance.

**System Error Messages**

---

**Error Message**

`%HD-3-OWNERR: Unit [dec], buffer ownership error`

**Explanation** An Ethernet interface is malfunctioning, or an internal software error has occurred.

**Recommended Action** Repair or replace the controller.

**IGRP Error Message**

Interior Gateway Routing Protocol error message

**Error Message**

`%IGRP-3-NOSOCKET: Unable to open socket for AS [dec]`

**Explanation** The requested operation could not be accomplished because of a low memory condition.

**Recommended Action** Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

**IP Error Messages**

Internet Protocol error messages

**Error Message**

`%IP-3-BADIPALIGN: Invalid alignment in packet for IP.  
[chars]=[hex]`

**Explanation** The packet data structure is misaligned. This condition may result in a small amount of overhead in processing IP traffic.

**Recommended Action** Enter a **show hardware** command and report the output, along with this error message, to your technical support representative.

**Error Message**

%IP-3-BADSRUTE: Improper source route. Length [dec]  
Ptr [dec]

**Explanation** A hardware or software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%IP-4-CLASS: Bad IP address [inet] and mask [inet]  
in class\_resolve()  
  
%IP-3-DESTHOST: src=[inet], dst=[inet], NULL desthost

**Explanation** An internal software error has occurred.

**Recommended Action** If either of these messages recur, call your technical support representative for assistance.

**Error Message**

%IP-4-DUPADDR: Duplicate address [inet] on [chars],  
sourced by [enet]

**Explanation** Another system is using your IP address.

**Recommended Action** Change the IP address of one of the two systems.

## IPRT Error Messages

Internet Protocol routing error messages

**Error Message**

%IPRT-2-COMPRESS: Bad route\_compress() call, sdb=  
[hex]

**Explanation** An internal software error has occurred.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

**System Error Messages**



**Error Message**

`%IPRT-3-NOMEMORY: No memory available for [chars]`

**Explanation** The requested operation failed because of a low memory condition.

**Recommended Action** Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

**Error Message**

`%IPRT-3-TOOMANYNETS: Too many networks in [char] [dec] (limit [dec])`

**Explanation** Too many **network** subcommands have been entered for this routing protocol.

**Recommended Action** Advisory message only. No action required.

## IPX Error Messages

Internetwork Packet Exchange error messages

**Error Message**

`%IPX-3-BADIGRPSAP: Cannot send incremental SAP update to peer on interface [chars]. Increase buffers or increase output-sap-delay.`

**Explanation** A hardware or software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

`%IPX-3-BADIGRPSATYPE: Unsupported SAP type for EIGRP being [chars] - type [hex]`

**Explanation** An unsupported SAP type has been detected.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%IPX-3-BADPATHS: Invalid number of paths [dec] for  
[hex]

**Explanation** An internal inconsistency has been detected in the IPX routing table structure.

**Recommended Action** Note the parameters associated with this message. If possible, clear the IPX routing table by issuing the **clear ipx route** command. (This will result in lost connectivity until the routing table is rebuilt.) If the message recurs, note the parameters and call your technical support representative for assistance.

**Error Message**

%IPX-3-NOMEMORY: Unable to allocate memory for [event]

**Explanation** The system has failed to allocate memory for an event. The event variable will be one of the following procedures which attempts to allocate memory:

- SAP queue routing table
- SAP update
- SAP update queue entry
- RIP update queue entry
- SAP heap sort pointer array
- RIP update
- EIGRP process route entry

**Recommended Action** Call your technical support representative for assistance.

## LANCE Error Messages

STS-10X or IGS Ethernet interface error messages

### Error Message

`%LANCE-4-BABBLE: Unit [dec], babble error, csr0 = [hex]`

**Explanation** An Ethernet interface is malfunctioning.

**Recommended Action** Repair or replace the controller.

### Error Message

`%LANCE-3-BADENCAP: Unit [dec], bad encapsulation in idbenctype = [hex]`

`%LANCE-3-BADUNIT: Bad unit number [dec]`

**Explanation** An internal software error has occurred.

**Recommended Action** If either message recurs, call your technical support representative for assistance.

### Error Message

`%LANCE-5-COLL: Unit [dec], excessive collisions.  
TDR=[dec]`

**Explanation** An Ethernet cable is broken or unterminated, or the transceiver is unplugged. The time delay reflectometer (TDR) counter is an internal LANCE counter that counts the time (in “ticks” of 100 ns each) from the start of a transmission to the occurrence of a collision. Because a transmission travels about 35 feet per tick, this value is useful to determine the approximate distance to a cable fault.

**Recommended Action** If the transceiver appears to be properly terminated, repair or replace the Ethernet interface card.

**Error Message**

%LANCE-1-INITFAIL: Unit [dec], initialization timeout failure, csr[dec] = [hex]

**Explanation** The hardware failed to initialize correctly.

**Recommended Action** Repair or replace the controller.

**Error Message**

%LANCE-5-LATECOLL: Unit [dec], late collision error

**Explanation** An Ethernet transceiver is malfunctioning, the Ethernet is overloaded, or the Ethernet cable is too long.

**Recommended Action** Repair or replace the controller.

**Error Message**

%LANCE-5-LOSTCARR: Unit [dec], lost carrier.  
Transceiver problem?

**Explanation** An Ethernet transceiver is unplugged or faulty.

**Recommended Action** Repair or replace the controller.

**Error Message**

%LANCE-1-MEMERR: Unit [dec], memory error, csr0 = [hex]

**Explanation** An Ethernet interface detected a hardware problem.

**Recommended Action** Repair or replace the controller.

**Error Message**

%LANCE-1-NOMEMORY: Unit [dec], no memory for [chars]

**Explanation** The requested operation could not be accomplished because of a low memory condition.

**Recommended Action** Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

**System Error Messages**

---

**Error Message**

%LANCE-3-OWNERR: Unit [dec], buffer ownership error

**Explanation** An Ethernet interface is malfunctioning, or an internal software error has occurred.

**Recommended Action** Repair or replace the controller.

**Error Message**

%LANCE-3-SPURIDON: Unit [dec], spurious IDON interrupt

**Explanation** An Ethernet interface generated a spurious Initialization Done interrupt.

**Recommended Action** Repair or replace the controller.

**Error Message**

%LANCE-3-UNDERFLO: Unit [dec], underflow error

**Explanation** The Ethernet hardware is requesting data faster than the system can supply it. This should never happen unless a serious malfunction has occurred.

**Recommended Action** Call your technical support representative for assistance.

## LANMGR Error Messages

IBM LAN Network Manager error messages

**Error Message**

%LANMGR-4-BADRNGNUM: Ring number mismatch on [chars], shutting down RPS.

**Explanation** The router has detected a conflict in assigned ring numbers for the specified Token Ring. The Ring Parameter Server (RPS) function has been shut down to prevent potentially incorrect information from being sourced onto the ring.

**Recommended Action** Check all bridges connected to this Token Ring and ensure that they are using the same assigned ring number.

**Error Message**

%LANMGR-4-BADUPCALL: Unexpected call ([chars]) from LLC2 for Bridge [hex]-[hex]-[hex].

**Explanation** An internal software error has occurred.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

**Error Message**

%LANMGR-4-OLDTRAMON: Cannot run RPS on [chars], Old TRAMON code.

**Explanation** The software on this interface cannot support the functions required for LAN Network Manager.

**Recommended Action** Call your technical support representative about a firmware upgrade for this interface card.

## LAPB Error Messages

X.25 Link Access Protocol, Balanced error messages

**Error Message**

%LAPB-4-CTRLBAD: Interface [chars], Invalid control field

**Explanation** A received FRMR reported a frame with an invalid control code.

**Recommended Action** Check the serial line and the devices attached to the line.

## System Error Messages

---

**Error Message**

%LAPB-4-FRAMEERR: Interface [chars], Frame error: CF [hex], VS[dec] [char] VR [dec], Reason [hex]

**Explanation** A FRMR frame was received, indicating that a protocol violation has been detected. The Reason field will be interpreted by generating INFOBAD, CTRLBAD, NITOOBIG, or INVNR messages immediately after this message; refer to the explanations for these messages for more information.

**Recommended Action** The protocol will recover by resetting the service. This will disrupt any network service on top of LAPB (for example, X.25 virtual circuits will be cleared). Follow the recommended action for any error message following the FRMR reports; if service becomes unacceptable, check the serial line and its attached devices.

**Error Message**

%LAPB-4-INFOBAD: Interface [chars], Info field not permitted

**Explanation** A received FRMR frame reported that an information field was present in a frame where no information field is allowed.

**Recommended Action** Check the serial line and the device attached to the line.

**Error Message**

%LAPB-4-INVNR: Interface [chars], Invalid NR value

**Explanation** A received FRMR reported a frame with an invalid N(R) value.

**Recommended Action** Verify that the equipment attached to the serial line is configured with the same K value (maximum number of outstanding I frames).

**Error Message**

%LAPB-4-N1TOOBIG: Interface [chars], N1 too large

**Explanation** A received FRMR reported an information frame that was too long.

**Recommended Action** Verify that the equipment attached to the serial line is configured with the same N1 value. N1 is in bits and includes the entire frame plus 16 bits of CRC. However, some equipment may require configuration in octets, the omission of the two CRC octets, or the omission of the three octets of LAPB control information.

**Error Message**

%LAPB-2-NOBUF: Interface [chars], no buffer available to [chars]

**Explanation** There was insufficient memory for the LAPB protocol engine to send a message.

**Recommended Action** This message is acceptable if it occurs infrequently, because the LAPB protocol is designed to handle loss of frames. Frequent occurrences can cause disruption of service. The system can be configured to ease memory demands or, if conditions warrant, the system can be upgraded to a larger memory configuration.

**Error Message**

%LAPB-3-NOINPIDB: Input idb not set

%LAPB-3-NULLPAK: Interface [chars], NULL packet ptr, rvr [dec], vs [dec], vr [dec]

**Explanation** An internal software error has occurred.

**Recommended Action** If either of these messages recur, call your technical support representative for assistance.

**System Error Messages**



## LAT Error Messages

DEC Local Area Transport error messages

### Error Message

%LAT-3-BADDATA: Tty[t-line], Data pointer does not correspond to current packet

%LAT-3-BUFFULL: Tty[t-line], data buffer full with count [dec]

**Explanation** An internal software error has occurred.

**Recommended Action** If either of these messages recur, call your technical support representative for assistance.

### Error Message

%LAT-3-NOSYNC: Tty[t-line], Output data ptrs out of sync with byte count

**Explanation** An internal software error has occurred.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

### Error Message

%LAT-3-NULLIDB: Null IDB pointer with destination [enet]

%LAT-3-QBSPACED: Queue block at [hex] not found for HI connection

%LAT-3-REUSE: Tty[t-line], Attempt to re-use slot array, empty =[dec], fill = [dec]

**Explanation** An internal software error has occurred.

**Recommended Action** If any of these messages recur, call your technical support representative for assistance.

## LINEPROTO Error Message

Line Protocol error message

### Error Message

`%LINEPROTO-5-UPDOWN: Line protocol on Interface [chars], changed state to [chars]`

**Explanation** The data link level line protocol has changed state.

**Recommended Action** Notification message only. No action required.

## LINK Error Messages

Data link error messages

### Error Message

`%LINK-3-BADENCAP: Interface [chars] Bad encapsulation code [dec]`

**Explanation** The lower level software was unable to write a MAC header for a datagram. A probable cause is configuration error.

**Recommended Action** Call your technical support representative for assistance.

### Error Message

`%LINK-3-BADEETHER: Interface [chars], Bad ethernet encaps code`

**Explanation** An internal software error has occurred.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

## System Error Messages

---

**Error Message**

%LINK-3-BADMACREG: Interface [chars], non-existent MACADDR registry for link [dec]

**Explanation** An attempt to map a network level address to a MAC level address has failed.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%LINK-2-BADVCALL: Interface [chars], undefined entry point

**Explanation** An internal software error has occurred. The high-level system code tried to use an unimplemented entry point with the virtual IDB driver.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

**Error Message**

%LINK-5-BOOTP: [chars] address [inet], resolved by [inet]

**Explanation** An interface's IP address was successfully learned dynamically through BootP. The first address is the learned IP address. The second IP address is the IP address of the BootP server that provided the information.

**Recommended Action** No action required.

**Error Message**

%LINK-4-BRIDGECONFLICT: [char], encapsulated BPDU  
recvd from [enet]

**Explanation** An FCIT running in nonencapsulating transparent mode has detected an FDDI bridge running in encapsulation mode on the same fiber. This is an unstable situation and should be corrected. The incoming interface is displayed, along with the FDDI MAC address in canonical form.

**Recommended Action** Upgrade the errant interface to full transparent mode. Call your technical support representative for assistance.

**Error Message**

%LINK-5-CHANGED: Interface [chars], changed state to  
[chars]

**Explanation** The interface hardware has changed state.

**Recommended Action** Notification message only. No action required.

**Error Message**

%LINK-4-FDDISTAT: Interface [chars], FDDI state  
[chars] detected

**Explanation** There has been a state change on the FDDI ring.

**Recommended Action** Dependent on the specific error condition. Call your technical support representative for assistance.

**Error Message**

%LINK-4-FDDIUNK: [chars]: unknown [hex] len [dec]

**Explanation** An unknown FDDI datagram was received.

**Recommended Action** Record the complete error message and call your technical support representative for assistance.

**System Error Messages**

**Error Message**

%LINK-2-LINEST: No linestate vector for [chars]

**Explanation** An internal software inconsistency has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%LINK-2-NOSOURCE: Source idb not set

%LINK-3-TOOBIG: Interface [chars], Output packet size of [dec] bytes too big

%LINK-2-UENCAP: Unknown line encapsulation code [dec]

**Explanation** An internal software error has occurred.

**Recommended Action** If any of these messages recur, call your technical support representative for assistance.

**Error Message**

%LINK-5-RARP: [chars] address [inet], resolved by [inet]

**Explanation** The Reverse Address Resolution Protocol (RARP) has resolved an IP address.

**Recommended Action** Notification message only. No action required.

**Error Message**

%LINK-3-REMLOOP: Interface [chars], remote loop [chars] [chars]

**Explanation** The interface entered or exited a remote loopback.

**Recommended Action** Notification message only. No action is required.

**Error Message**

%LINK-5-SLARP: [chars] address [inet], resolved by [inet]

**Explanation** The Serial Line Address Resolution Protocol (SLARP) has resolved an IP address.

**Recommended Action** Notification message only. No action required.

**Error Message**

%LINK-3-UPDOWN: Interface [chars], changed state to [chars]

**Explanation** The interface hardware has gone either up or down.

**Recommended Action** If the state change was unexpected, check the configuration settings for the interface.

**MAILBOX Error Messages**

ChipCom mailbox error messages

**Error Message**

%MAILBOX-3-BADDATA: Bad data in mailbox test, got [hex], expected [hex]

%MAILBOX-3-FLAGSTAT: Timeout while waiting for FLAGSTAT, status=[hex]

%MAILBOX-3-INITPC2: Timeout waiting for PC2 during initialization, status=[hex]

%MAILBOX-3-INTERR: Bad mailbox interrupt = [hex]

%MAILBOX-3-MAIL020: Timeout while waiting for MAIL020, status=[hex]

%MAILBOX-3-MAILFAIL: Mailbox failed to initialize

%MAILBOX-3-PC2: Timeout while waiting for PC2, status=[hex]

%MAILBOX-3-SPURINT: Spurious mailbox interrupt = [hex], MAIL020 not asserted

**Explanation** A hardware problem was detected in a ChipCom interface board.

**Recommended Action** If any of these messages recur, call your technical support representative for assistance.

## MCI Error Messages

Multiport Communications Interface error messages

### Error Message

%MCI-5-INPUTERR: Interface [chars] excessive input error rate

**Explanation** The input error rate was so high that the interface was temporarily disabled. The interface will be automatically reenabled in 30 seconds.

**Recommended Action** If this message recurs, check the communication lines.

### Error Message

%MCI-4-NOCOOKIE: MCI controller[dec] missing configuration data - disabled

**Explanation** The configuration PAL is missing.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

### Error Message

%MCI-4-NOKEEPALIVE: Interface [chars] keepalive not sent

**Explanation** The requested operation could not be accomplished because of a low memory condition.

**Recommended Action** Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

---

## System Error Messages



**Error Message**

`%MCI-5-OBSOLETE: Obsolete MCI firmware: can't route [chars] and bridge simultaneously`

**Explanation** The firmware on your MCI controller card is out of date.

**Recommended Action** Upgrade your MCI firmware.

**Error Message**

`%MCI-4-RSETFAIL: Interface [chars] failed to reset properly in[chars], code [hex]`

**Explanation** A hardware device did not respond appropriately to a request. This generally indicates a hardware problem.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

`%MCI-3-RXINDEX: Unit [dec], invalid RX index [dec]`

**Explanation** The MCI did not answer a Multibus request. This generally indicates a hardware problem.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

`%MCI-3-SETUPERR: Unit [dec], Error ([hex]) on setup, index [hex], restarting controller - mci_interrupt()`

**Explanation** A hardware device did not respond appropriately to a request. This generally indicates a hardware problem.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%MCI-4-TESTFAIL: Unit [dec] failed [chars] test,  
skipping

**Explanation** A hardware component failed an internal diagnostic test.

**Recommended Action** Call your technical support representative for assistance. You need to replace the malfunctioning component.

## MK5025 Error Messages

MK5025 serial controller error messages

### Error Message

%MK5-3-BADENCAP: Unit [dec], bad encapsulation  
in idb->enctype = [hex]

%MK5-3-BADRING: Bad [chars] ring size

%MK5-3-BADUNIT: Bad unit number [dec]

**Explanation** An internal software error has occurred.

**Recommended Action** If either of these messages recur, call your technical support representative for assistance.

### Error Message

%MK5-0-INITFAIL: Unit [dec], initialization timeout  
failure,csr[dec]=[hex]

%MK5-1-INITNOPPRIM: Unit [dec], initialization  
failure - No CSR1\_PPRIM\_INIT\_CONF, csr1 = [hex]

%MK5-1-INITUERR: Unit [dec], initialization CSR1\_UERR  
failure,csr1=[hex]

**Explanation** The hardware failed to initialize correctly.

**Recommended Action** Repair or replace the controller.

### Error Message

%MK5-5-LINEFLAP: Unit [dec] excessive modem control  
changes

**Explanation** Too many modem control interrupts have been received.  
The port has been disabled to prevent excessive use of the CPU.

**Recommended Action** Check the cable on the serial port.

**Error Message**

%MK5-1-MEMERR: Unit [dec], memory error, csr0 = [hex]

**Explanation** A network serial interface detected a hardware problem.

**Recommended Action** Repair or replace the controller.

**Error Message**

%MK5-0-NOMEMORY: Unit [dec], no memory for [chars]

**Explanation** The requested operation could not be accomplished because of a low memory condition.

**Recommended Action** Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

**Error Message**

%MK5-3-ODDSTART: Interface [chars], Odd datagram  
start = [hex], pak =[hex]

%MK5-3-OUTENCAP: Unit [dec], bad output packet  
encapsulation: [hex]

**Explanation** An internal software error has occurred.

**Recommended Action** If either of these messages recur, call your technical support representative for assistance.

**Error Message**

%MK5-3-OWNERR: Unit [dec], buffer ownership error

**Explanation** An Ethernet interface is malfunctioning, or an internal software error has occurred.

**Recommended Action** Repair or replace the controller.

**System Error Messages**

---

**Error Message**

%MK5-3-PLOSTERR: Unit [dec], provider primitive lost,csr0=[hex], csr1=[hex]

%MK5-3-PPRIMERR: Unit [dec], unexpected provider primitive, csr0=[hex], csr1=[hex]

%MK5-3-SPURPPRIMERR: Unit [dec], spurious provider primitive, csr0=[hex], csr1=[hex]

%MK5-3-UPRIMERR: Unit [dec], user primitive error, csr0=[hex], csr1=[hex]

**Explanation** A network serial interface detected a hardware problem.

**Recommended Action** Repair or replace the controller.

## NIM Error Messages

Network interface module error messages

**Error Message**

%NIM-2-BADSLLOT: Illegal reference to non-existent slot [dec]

%NIM-2-BADSUBUNIT: Illegal reference to non-existent subunit [dec] in slot [dec]

%NIM-2-DEADICHAINQ: Attempted to manipulate uninitialized ichainQ in [chars]

%NIM-2-LOSTICHAINQ: Couldn't find idb [hex] in ichainQ in [chars]

%NIM-2-NOHWADDRESS: All hardware addresses have been allocated - maximum of [dec]

**Explanation** An internal software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

## OIR Error Messages

Online insertion and removal error messages

### Error Message

```
%OIR-6-INSCARD: Card inserted in slot [dec],  
interfaces administratively shut down
```

**Explanation** The OIR facility has detected a newly inserted processor in slot [n]. The inserted interface will be shut down until it is configured by the user or, if an interface of that type was previously configured, it will be restored to its previous state.

**Recommended Action** Informational message only. No action required.

### Error Message

```
%OIR-6-REMCARD: Card removed from slot [dec],  
interfaces disabled
```

**Explanation** The OIR facility has detected the removal of a processor from slot [n]. The interfaces on that processor will be administratively shut down and marked as removed. The routing table will be flushed of any routes through the removed interfaces.

**Recommended Action** Informational message only. No action required.

## OSPF Error Messages

Open Shortest Path First error messages

### Error Message

`%OSPF-4-BADLENGTH: Invalid length [dec] in OSPF packet from [inet] (ID [inet]), [chars]`

**Explanation** The system has received an OSPF packet with a length field of less than normal header size or inconsistent with the size of the IP packet in which it arrived. This indicates an error in the sender of the packet.

**Recommended Action** Call your technical support representative for assistance.

### Error Message

`%OSPF-4-BADLSATYPE: LOG_WARNING, MSG_PROCESS | MSG_TRACEBACK Invalid lsa type [dec] in LSA [dec], [dec] from [dec], OSPF_COMPLAIN-IVL`

**Explanation** The router has received an LSA with invalid LSA Type. The cause is either memory corruption or unexpected behavior on a router.

**Recommended Action** From neighbor address, locate the problem router and reboot it. To determine what is causing this problem, call your technical support representative for assistance.

### Error Message

`%OSPF-4-CONFLICTING_LS Aid: Found lsa type [dec] in LSA [inet], [inet] from [inet], [chars]`

**Explanation** An internal software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%OSPF-4-ERRRCV: Received invalid packet: [chars] from [inet], [chars]

**Explanation** An invalid OSPF packet has been received. Details are included in the error message. The cause might be a misconfigured OSPF or an internal error in the sender.

**Recommended Action** Check the OSPF configuration of the receiver and the sender for inconsistency.

**Error Message**

%OSPF-3-INTERNALERR: Internal error: [chars], OSPF\_COMPLAIN\_IVL

**Explanation** An internal software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%OSPF-3-NOBACKBONE: Flagged as being an ABR without a backbone

**Explanation** The router has been flagged as an Area Border Router (ABR) without backbone area in the router.

**Recommended Action** Restart the OSPF process.

**Error Message**

%OSPF-3-NOCONNDB: No database entry for connected address [int]

**Explanation** While calculating OSPF routes, the router could not find the Link State Advertisement that represents the connected route in the router.

**Recommended Action** Clear the ip routes in the routing table by entering the command **clear ip ro**.

**System Error Messages**

---



**Error Message**

%OSPF-3-NOLSA: Failed to find this router LSA in [chars]

**Explanation** The router is not able to find its own Router Link State Advertisement. This can occur occasionally and self-correct. However, if this message recurs, restart the OSPF process.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%OSPF-3-NOMEMORY: No memory for [chars]

**Explanation** The requested operation could not be accomplished because of a low memory condition.

**Recommended Action** Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

**Error Message**

%OSPF-4-NONEIGHBOR: Received [chars] from unknown neighbor [inet]

**Explanation** OSPF hello, database description, or database request packet was received, but the router could not identify the sender.

**Recommended Action** This situation should correct itself. If the message recurs, call your technical support representative for assistance.

**Error Message**

%OSPF-4-NORTRID: Could not allocate router ID

**Explanation** OSPF failed while attempting to allocate a router ID from the IP address of one of its interfaces.

**Recommended Action** Make sure that there is at least one interface that is up and has a valid IP address. If there are multiple OSPF processes running on the router, each process needs its own unique router ID. You must have enough “up” interfaces so that each of them can obtain a router ID.

**Error Message**

```
%OSPF-6-NOSRCPDB: ex_route_callback(): Can't find the  
src protocol to redistribute net [inet] [inet]
```

**Explanation** OSPF has attempted to redistribute a route but could not find a valid source protocol.

**Recommended Action** No action is required.

**Error Message**

```
%OSPF-6-NOTREDIST1: ex_route_callback(): do not  
redistribute net [inet] [inet], [chars]
```

**Explanation** For information only.

**Recommended Action** No action is required.

**Error Message**

```
%OSPF-6-NOTREDIST3: build_ex_route(): don't  
redistribute net [inet] [inet], [inet] advertises it  
already
```

**Explanation** For information only.

**Recommended Action** No action is required.

**Error Message**

```
%OSPF-4-NOTREDIST4: Database scanner: external LSA  
[inet] [inet] is lost, reinstalls
```

**Explanation** The software has detected an unexpected condition. The router will take corrective action and continue.

**Recommended Action** Record the entire error message and note any OSPF problem you experience. Report the error message to your technical support representative.

**System Error Messages**

---

**Error Message**

```
%OSPF-4-NOTREDIST5: db_free: external LSA [inet]
[inet],
```

**Explanation** An internal software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

```
%OSPF-3-UNKNOWNSTATE: Reached unknown state in
neighbor state machine
```

**Explanation** An internal software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

## PAD Error Messages

X25 packet assembler/disassembler (PAD) error messages

**Error Message**

```
%PAD-3-GETLINE: Tty[t-line], bad return code [dec]
fromx3_getline()
```

```
%PAD-2-INTR: [chars] called at interrupt level [hex]
```

```
%PAD-2-PUTSETUP: Tty[t-line], buffer already setup
```

**Explanation** An internal software error has occurred.

**Recommended Action** If any of these messages recur, call your technical support representative for assistance.

## PARSER Error Messages

Parser error messages

### Error Message

%PARSER-3-BADSUBCMD: Unrecognized subcommand in

Function: [chars]

Command: `[chars]

Switch value: [dec]

%PARSER-3-CREATEINT: Can't create any more  
subinterfaces

%PARSER-4-INVLDLINE: Invalid line in NV generation:  
[chars]

%PARSER-4-LINKPOINT: Parser reached link\_point

%PARSER-4-MULFUNCS: Unknown test in  
test\_multiple\_funcs [char]

%PARSER-4-MULTIPLEIFS: interface\_action: multiple ifs  
present when unit\_only set

%PARSER-3-NOLINK: no link\_point [dec] in the [chars]  
[chars] command chain

%PARSER-4-NUMHELP: general\_number\_short\_help: Invalid  
[chars] number flag

%PARSER-4-NVGEN: nvgen\_token called but csb->nvgen not  
set

%PARSER-4-PROTOADDR: protoaddr\_action: Unknown  
link\_type [dec]

**Explanation** The parser has failed an internal software check.

**Recommended Action** Call your technical support representative for  
assistance.

---

## System Error Messages

**Error Message**

`%PARSER-3-NOMEMORY: [chars]: no memory for [chars]`

**Explanation** A memory allocation failed, possibly because the router is out of memory, or because the parser is using more memory than it should.

**Recommended Action** If the router is running out of memory, reduce other system activity to ease memory demands. If the router has sufficient memory but the parser is low on memory, call your technical support representative for assistance.

## PPP Error Messages

Point-to-Point Protocol error messages

**Error Message**

`%PPP-4-CONFNAK: fsm_rconfnak([hex]) - possible  
CONFNAK loop`

**Explanation** The remote and local PPP cannot agree on a set of options that both can perform.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

**Error Message**

`%PPP-4-IPXNET: mismatched IPX network numbers. Ours =  
[hex], theirs = [hex]`

**Explanation** The two ends of a serial link have different IPX network numbers.

**Recommended Action** Check the configuration of both devices.

**Error Message**

%PPP-6-LOOPED: The line appears to be looped back

**Explanation** The communications line appears to be echoing the characters that are sent to it.

**Recommended Action** Check your data communications equipment to make sure it is configured correctly.

**Error Message**

%PPP-4-NOEXTTACACS: PPP TACACS is configured but extended TACACS is not.

**Explanation** PPP was configured to use TACACS, but “extended TACACS” has not been configured or has been disabled.

**Recommended Action** Either issue the **no ppp use-tacacs** command to stop PPP from using TACACS, or issue the **tacacs-server extended** command to enable extended TACACS.

## QLLC Error Messages

Qualified Logical Link Control error messages

**Error Message**

%QLLC-3-BADOPCODE: Opcode [chars] is invalid

**Explanation** Either remote source-route bridging or local acknowledgment is configured incorrectly.

**Recommended Action** Verify that remote source-route bridging and local acknowledgment are configured correctly.

**Error Message**

%QLLC-3-BADQLLCSTATE: Bad QLLC state - [chars]

**Explanation** An invalid QLLC primitive was detected.

**Recommended Action** Verify that the partner QLLC device is configured correctly.

## System Error Messages

---

**Error Message**

%QLLC-3-BADRSRBOPCODE: Bad opcode [hex] from [enet] to [enet]

**Explanation** Either remote source-route bridging is incorrectly configured, or the other RSRB device is down.

**Recommended Action** Verify that remote source-route bridging is configured correctly with the right version of the IOS software.

**Error Message**

%QLLC-3-BADSTATE: Bad QLLC state - [chars] - [enet]

**Explanation** An invalid LLC primitive was detected.

**Recommended Action** Verify that the Token Ring ports and any participating LAN devices are configured correctly.

**Error Message**

%QLLC-3-BADSTATEEVENT: Bad QLLC state - [chars] event - [chars] macaddr - [enet]

**Explanation** The LLC primitive specified has placed the router in an invalid state.

**Recommended Action** Verify that the Token Ring ports and any participating LAN devices are configured correctly.

**Error Message**

%QLLC-3-DIFFPRTR: [enet] - Different partner - originally [enet] - now [enet]

**Explanation** The partner for this QLLC virtual MAC address does not match the MAC address that was defined with the **qlc partner** command.

**Recommended Action** Verify that the **qlc partner** statement in the configuration file is correct.

**Error Message**

`%QLLC-3-GENERRMSG: [chars]`

**Explanation** The text string provided with this error message describes the specific QLLC problem.

**Recommended Action** Follow the instructions that appear with the error message. Call your technical support representative for assistance.

**Error Message**

`%QLLC-3-IFRAME: [chars]`

**Explanation** An I-Frame has been discarded due to network congestion.

**Recommended Action** Verify that the LAN is not beaconing and that it is not in a congested state. Call your technical support representative for assistance.

**Error Message**

`%QLLC-3-LNXNOTFOUND: lnx_remove_macaddr_hash did not find target lnx`

**Explanation** The **qlc srb** command was not defined for this interface.

**Recommended Action** Add a valid **qlc srb** statement for this serial interface.

**Error Message**

`%QLLC-3-NOLLC2: Unable to open an llc2 session`

**Explanation** An LLC2 session could not be established with the destination MAC address.

**Recommended Action** Verify that the **qlc partner** statement in the configuration file is correct, and that the partner is on the desired LAN.

**System Error Messages**

---



**Error Message**

%QLLC-3-NOMACADDR: No lnx entry for macaddr [enet]

**Explanation** No virtual MAC address has been defined for this interface.

**Recommended Action** Define the virtual MAC address, using either the **x25 map qlc** or the **x25 pvc qlc** command.

**Error Message**

%QLLC-3-NOMEM: Not enough memory available

**Explanation** There is not enough memory in the system to complete this request.

**Recommended Action** Add more memory to the router. Otherwise, reduce the configuration or the load on the router.

**Error Message**

%QLLC-3-NONULLXID: Couldn't make null xid - [enet]  
-[enet]

**Explanation** An attempt to create an IEEE XID failed.

**Recommended Action** Verify that the **qlc partner** statement in the configuration file is correct, and that the partner is on the desired LAN.

**Error Message**

%QLLC-3-NOPAKENQ: Pak enqueue failed

**Explanation** A packet was not sent to the LAN.

**Recommended Action** Verify that the LAN partner is configured correctly, and that the partner is on the desired LAN.

**Error Message**

%QLLC-4-NOQLLC: Unable to open qllc session; current statue is [chars]

**Explanation** A QLLC session could not be established.

**Recommended Action** Verify that the **qllc partner** and the **qllc xid** commands are correct.

**Error Message**

%QLLC-3-NOXID2: Couldn't make xid - [enet] -[enet]

**Explanation** The QLLC XID could not be forwarded to the LAN.

**Recommended Action** Verify that the **qllc partner** and the **qllc xid** commands are correct.

**Error Message**

%QLLC-3-NULLPTR: [chars] ptr is null

**Explanation** The specified structure has not been configured.

**Recommended Action** Check the configuration commands for the structure.

## RCMD Error Messages

Remote command error messages

**Error Message**

%RCMD-4-INVALIDHOST: Invalid host address

**Explanation** The IP address of the incoming connection was not valid.

**Recommended Action** Add an entry to the rhost database or determine which client ip address is valid by examining the rhost database.

**System Error Messages**

**Error Message**

`%RCMD-4-NOMEMORY: No memory available for Rcmd`

**Explanation** There was not enough memory for rcp or rsh to allocate memory.

**Recommended Action** Wait for memory to become available, or add more memory.

**Error Message**

`%RCMD-4-NORSHPROC: Rsh Process Fork failed`

**Explanation** Creation of the rsh daemon failed. This is usually caused by a lack of resources such as memory or vty.

**Recommended Action** Wait for resources to become available.

**Error Message**

`%RCMD-4-RCMDDNSFAIL: DNS hostname/ip address mismatch`

**Explanation** The IP address for an incoming rcmd request is not registered with DNS.

**Recommended Action** Add the IP address to DNS.

**Error Message**

`%RCMD-4-RCPATTEMPTED: Remote copy denied`

**Explanation** An attempt was made to connect to a router through rcp, but the router was not configured as an rcp server.

**Recommended Action** Configure an rcp server.

**Error Message**

`%RCMD-4-RSHATTEMPTED: Remote shell denied`

**Explanation** An attempt was made to connect to a router through rsh, but the router was not configured as an rsh server.

**Recommended Action** Configure an rsh server.

**Error Message**

`%RCMD-4-RSHPORTATTEMPT: Attempted to connect to RSHELL port`

**Explanation** An attempt was made to connect to a router through the rshell port (514), but the router was not configured as an rsh or rcp server.

**Recommended Action** Configure an rsh or rcp server.

**REGEXP Error Message**

Regular expression parser error messages

**Error Message**

`%REGEXP-2-BADLIST: Regular expression access check with bad list [dec]`

**Explanation** An internal software error has occurred.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

**REMIF Error Messages**

Remote interface error messages

**Error Message**

`%REMIF-3-BADCMD: [dec] from [inet]`

**Explanation** An internal software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**System Error Messages**

---

**Error Message**

%REMIF-3-CLOSED: [chars] has released [chars

**Explanation** An internal software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%REMIF-3-DUOPEN: [chars] is already open by [chars]

**Explanation** An internal software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%REMIF-3-IFNONE: [chars] does not exist. Requested by [chars]

**Explanation** An internal software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%REMIF-3-IQUEUE: Input on [chars]

**Explanation** An internal software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%REMIF-3-NOMEM: No available memory for [chars]

**Explanation** An internal software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%REMIF-3-OPEN: [chars] now owns [chars]

**Explanation** An internal software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%REMIF-3-OQUEUE: Output on [chars]

**Explanation** An internal software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%REMIF-3-TCPERR: TCP error, status [dec]

**Explanation** An internal software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**RIP Error Message**

IP Routing Information Protocol error message

**Error Message**

%RIP-3-NOSOCKET: Unable to open socket

**Explanation** The requested operation could not be accomplished because of a low memory condition.

**Recommended Action** Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

**RSRB Error Messages**

Remote source-route bridging error messages

**System Error Messages**

**Error Message**

%RSRB-4-BADLEN: Peer [chars], [chars], bad length [dec], trn [dec]

%RSRB-4-BADLENIP: Peer [dec]/[inet], [chars], bad length [dec],trn [dec]

**Explanation** An internal software error has occurred.

**Recommended Action** If either message recurs, call your technical support representative for assistance.

**Error Message**

RSRB-3-BADVERSIONFST: FST in: [chars]: version mismatch, mine [dec], theirs [dec]

%RSRB-3-BADVERSIONIF: IF in: [chars]: version mismatch, mine [dec], theirs [dec]

**Explanation** The remote end of a direct serial peer is running the wrong version of the system software. Either the local end, the remote end, or both are not up to date.

**Recommended Action** Call your technical support representative for an update.

**Error Message**

%RSRB-3-BADVERSIONTCP: [chars]: [dec]/[inet]: version mismatch, mine [dec], theirs [dec]

**Explanation** The remote end of a TCP remote peer is running the wrong version of the system software. Either the local end, the remote end, or both are not up to date.

**Recommended Action** Call your technical support representative for an update.

**Error Message**

%RSRB-4-BADVRE: Bad vre type

%RSRB-4-CONIPST: Peer [dec]/[inet], CONN, illegal  
state  
[dec]

%RSRB-4-CONNILLSTATE: Peer [dec]/[inet], CONN, illegal  
state [dec]

%RSRB-4-CONNSTAT: Peer [dec]/[interface], IFin, bad  
connection state [dec]

**Explanation** An internal software error has occurred.

**Recommended Action** If any of these messages recur, call your technical support representative for assistance.

**Error Message**

%RSRB-3-FSTERR: [char]: [char]: [inet], op [hex], len  
[dec], trn [dec]

**Explanation** The remote end of a direct serial RSRB connection has detected a configuration problem or traffic that is not recognized by the configuration.

**Recommended Action** Examine the configuration on both sides of the serial connection for possible problems. Examine the traffic being offered for propagation with respect to the configuration. The destination target ring is denoted by the value of trn.

**Error Message**

%RSRB-3-HDRNOVRP: Peer [inet], HDR, no vrp

%RSRB-4-HDRRECV: Peer [dec]/[inet], HDR, rcv state  
invalid, not empty [dec]

%RSRB-3-HDRVRP: Peer [dec]/[inet], HDR, vrp state  
wrong, [dec]

**Explanation** An internal software error has occurred.

**Recommended Action** If any of these messages recur, call your technical support representative for assistance.

**System Error Messages**



**Error Message**

```
%RSRB-3-IFERR: [chars]: [chars]: [chars], op [hex],  
len  
[dec], trn [dec]
```

**Explanation** The remote end of a direct serial RSRB connection has detected a configuration problem or traffic that is not recognized by the configuration.

**Recommended Action** Examine the configuration on both sides of the serial connection for possible problems. Examine the traffic being offered for propagation with respect to the configuration. The destination target ring is denoted by the value of *trn*.

**Error Message**

```
%RSRB-4-ILLPEER: Peer [chars] [[hex]], illegal state  
[dec]  
  
%RSRB-4-LOCAL: Unit [dec], local/vring set  
simultaneously,vrn [dec]
```

**Explanation** An internal software error has occurred.

**Recommended Action** If either of these messages recur, call your technical support representative for assistance.

**Error Message**

```
%RSRB-3-NOMEMORY: Unit [dec], no memory for [chars]
```

**Explanation** The requested operation could not be accomplished because of a low memory condition.

**Recommended Action** Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

**Error Message**

%RSRB-3-NOTREM: Null idb and not remote  
%RSRB-4-OPTNULL: Remopened and t NULL  
%RSRB-4-PEERSTAT: Peer [chars], wrong state [dec]

**Explanation** An internal software error has occurred.

**Recommended Action** If any of these messages recur, call your technical support representative for assistance.

**Error Message**

%RSRB-3-SENDPUNTFST : [chars]: sent [chars] to  
[dec]/[chars]  
%RSRB-3-SENDPUNTIF: [chars]: sent [chars] to  
[dec]/[chars]

**Explanation** The local end of a direct serial RSRB connection has detected a configuration problem or traffic that is not recognized by the configuration.

**Recommended Action** Examine the configuration on both sides of the serial connection for possible problems. Examine the traffic being offered for propagation with respect to the configuration.

## SDLC Error Messages

Synchronous Data Link Control error messages

**Error Message**

%SDLC-4-CTRLBAD: Interface [chars], Invalid control  
field

**Explanation** A bad SDLC frame was received.

**Recommended Action** If this message recurs, check the SDLC serial line and the devices attached to it.

**System Error Messages**

**Error Message**

%SDLC-4-DROPPED: Dropped X.25 packet from SDLC hold queue

**Explanation** An SDLC frame had to be dropped from the output hold queue, usually because of excessive congestion on the output link.

**Recommended Action** If this message occurs frequently, determine why your SDLC link is being overloaded with data and resolve the cause (typically by either increasing bandwidth to your SDLC line or reducing the load on your link).

**Error Message**

%SDLC-4-FRAMEERR: Interface [chars], Frame error: CF [hex], VS [dec] [char] VR [dec], Reason [hex]

**Explanation** A FRMR frame was received. This can be due to a noisy serial line, an overloaded SDLC device, or corrupted data.

**Recommended Action** If this message recurs, service the serial line and the devices attached to it.

**Error Message**

%SDLC-2-ILLEGSTATE: Illegal state, [hex] [dec]

**Explanation** An internal SDLC state violation was detected.

**Recommended Action** Record the entire error message and call your technical support representative for assistance.

**Error Message**

%SDLC-4-INFOBAD: Interface [chars], Info field not permitted

%SDLC-4-INVNR: Interface [chars], Invalid NR value

**Explanation** A bad SDLC frame was received.

**Recommended Action** If any of these messages recur, check the SDLC serial line and the devices attached to it.

**Error Message**

%SDLC-4-N1TOOBIG: Interface [chars], N1 too large

**Explanation** An information frame was received from the other end of the SDLC link that was larger than allowed with the N1 parameter on this link.

**Recommended Action** Either increase the value of the N1 parameter for this interface on the router or reduce the size of the maximum information frame sent by the other end of the link.

**Error Message**

%SDLC-2-NOBUF: Interface [chars], no buffer available to [chars]

**Explanation** Insufficient memory available.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

**Error Message**

%SDLC-4-NOFRMRSPACE: Cannot allocate a FRMR frame

**Explanation** The router needed to generate an FRMR frame but could not allocate the necessary memory for the frame.

**Recommended Action** The fact that memory is so low that it cannot allocate the frame is far more serious than the reason for generating the FRMR. Fix the cause of low memory, and if the problem still occurs, determine why the FRMR must be sent.

**Error Message**

%SDLC-3-NOINPIDB: Input idb not set

**Explanation** This is a software error. A frame was given to the SDLC handler to process, but the interface on which the frame arrived is not known.

**Recommended Action** Call your technical support representative for assistance.

**System Error Messages**

---

**Error Message**

%SDLC-2-NOPOINTER: AW\_SDLC\_SEC with no sdllc\_llc pointer

**Explanation** An error condition occurred during SDLLC initiation.

**Recommended Action** No action is required. The SDLLC session will restart without operator intervention.

**Error Message**

%SDLC-3-NULLPAK: Interface [chars], NULL packet ptr, rvr [dec], vs [dec], vr [dec]

**Explanation** An internal software error occurred in the router's SDLC processing system.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%SDLC-4-SDLC\_ERR: SDLC\_ERROR with no poll

**Explanation** A protocol error was detected on a secondary station, but FRMR could not be sent because the station did not own the poll bit. This message indicates either poor line conditions or a faulty SDLC implementation.

**Recommended Action** If the message recurs, perform traces on the SDLC line. Call your technical support representative for assistance.

**Error Message**

%SDLC-4-UNKNOWNADDR: Received input for unknown addr/input addr [hex]. Tossing frame.

**Explanation** SDLC frames were received from an unknown (unconfigured) SDLC address.

**Recommended Action** Either configure the station for SDLLC or STUN, or shut down the serial interface to disable the line. Call your technical support representative for assistance.

**Error Message**

%SDLC-4-WRONGADDR: [interface], data from wrong address, expected [addr], received [addr]

**Explanation** This condition typically occurs on multidropped lines when the T1 timer interval is too short or the **sdlc line-speed** command has not been configured. In rare cases the RTS/CTS handshake can delay the transmission of a frame so long that a response is returned after the next station has been polled.

**Recommended Action** Adjust the value of the **sdlc line-speed** statement in the configuration file. (Either take line traces to observe appropriate T1 timer intervals, or adjust empirically.)

**SDLLC Error Messages**

Synchronous Data Link Control/Logical Link Control Type 2 translation error messages

**Error Message**

%SDLLC-5-ACT\_LINK: SDLLC: [chars] LINK address [hex] ACTIVATED: [chars]

**Explanation** An SDLLC media conversion session has been activated.

**Recommended Action** No action is required.

**Error Message**

%SDLLC-5-DACT\_LINK: SDLLC: [chars] LINK address [hex] DEACTIVATED: [chars]

**Explanation** An SDLLC media conversion session has been deactivated. If deactivation is a result of an error condition, this message will include a reason.

**Recommended Action** If the message does not include a description of an error, the deactivation was normal and the message is for information only. If the message does include a description of an error, begin problem analysis. Determine whether session loss is related to llc2 timers by

**System Error Messages**

issuing the **debug llc2-err** command. If the problem is related to llc2 timers, consider using SDLLC with the local acknowledgment feature. Call your technical support representative for assistance.

## SEC Error Messages

IP security error messages

### Error Message

%SEC-3-NOMAX: No default for NLESO defined

%SEC-2-NOOPT: Box secured, no option on internal packet

%SEC-2-NOTSEC: First opt in tcb not BASIC security

%SEC-2-SECINS: Security opt in tcb not SECINSERT

**Explanation** An internal software error has occurred.

**Recommended Action** If any of these messages recur, call your technical support representative for assistance.

### Error Message

%SEC-4-TOOMANY: Box secured, too many options on internal packet

**Explanation** No room for all desired IP header options. Packet discarded.

**Recommended Action** Configure for fewer IP header options.

## SLIP Error Messages

Serial Line IP error messages

### Error Message

%SLIP-2-BADQUOTE: Impossible quoted character [hex]

%SLIP-2-BADSTATE: Impossible input state [hex]

**Explanation** An internal software error has occurred.

**Recommended Action** If either of these messages recurs, call your technical support representative for assistance.

## SNMP Error Messages

Simple Network Management Protocol error messages

### Error Message

%SNMP-4-NOTRAPIP: SNMP trap source [chars] has no ip address

**Explanation** The user has entered an **snmp-server trap-source** command. The interface requested for use as the source address has no address associated with it. The SNMP trap is being sent anyway, but without the source address that the user intended.

**Recommended Action** There are two possible solutions. Either enter a **no snmp-server trap-source** command to disable the request for a specific source IP address, or add an IP address to the interface referenced in the **snmp-server trap-source** configuration command.

---

## System Error Messages



**Error Message**

`%SNMP-3-SOCKET: can't open UDP socket`

**Explanation** The SNMP server was unable to open a port for receiving SNMP requests. This usually happens when the SNMP server is started using the **snmp-server community** configuration command on a router or communication server with an interface that has no IP address configured. Another possible cause is low memory.

**Recommended Action** Configure at least one interface with an IP address or specify the **no snmp-server** command to remove the SNMP server process. Call your technical support representative if problems persist or if it becomes necessary to add memory.

## SSE Error Messages

Silicon switching engine error messages

**Error Message**

`%SSE-3-BADMEMORY: SSE memory failure detected`

**Explanation** A memory error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

`%SSE-2-HUNG: SSE hung -- [chars]`

**Explanation** The SSE is hung.

**Recommended Action** Reboot the SSE.

**Error Message**

`%SSE-2-HWFAILURE: SSE hardware failure-- [chars] code  
[hex]`

**Explanation** A hardware error has occurred, indicating an unexpected condition on the SSP board.

**Recommended Action** It might be necessary to replace the SSP. Call your technical support representative for assistance.

**Error Message**

`%SSE-2-MEMERROR: SSE memory failure, address [hex]  
expected [hex], got [hex]`

**Explanation** A hardware error has occurred, indicating memory failure on the SSP board.

**Recommended Action** It might be necessary to replace the SSP. Call your technical support representative for assistance.

**Error Message**

`%SSE-3-NOMEMORY: No memory available for [chars]`

**Explanation** An operation could not be accomplished because of a low memory condition.

**Recommended Action** Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

**Error Message**

`%SSE-2-NOTZERO: Program memory does not start at zero`

**Explanation** A hardware error has occurred, indicating an unexpected condition on the SSP board.

**Recommended Action** It might be necessary to replace the SSP. Call your technical support representative for assistance.

**System Error Messages**

---

**Error Message**

%SSE-2-SWFAILURE: SSE software failure -- [chars]  
[hex]

**Explanation** A software failure has occurred.

**Recommended Action** Call your technical support representative for assistance.

## STANDBY Error Messages

Hot Standby Router Protocol error messages

### Error Message

```
%STANDBY-3-BADAUTH: Bad authentication from [inet],  
remote state [chars]
```

**Explanation** Two routers participating in the Hot Standby protocol disagree on the valid authentication string.

**Recommended Action** Use the **standby authentication** interface command to repair the Hot Standby protocol authentication discrepancy between the local system and the one whose IP address is reported.

### Error Message

```
%STANDBY-3-NOBUFFER: No buffer available for sending  
HELLO
```

**Explanation** The Hot Standby protocol software was unable to allocate a packet buffer. The system may be out of memory.

**Recommended Action** Record the output from the following commands: **show proc mem** (repeated twice), **show mem**, **show buffers**, **show version**, **write terminal**. Provide this information to your technical support representative.

### Error Message

```
%STANDBY-3-NOMEMORY: No memory available for [chars]
```

**Explanation** The system was unable to initialize the Hot Standby protocol on an interface. The system may be out of memory.

**Recommended Action** Record the output from the following commands: **show proc mem** (repeated twice), **show mem**, **show version**, **write terminal**. Provide this information to your technical support representative.

---

## System Error Messages

**Error Message**

%STANDBY-3-NOSOCKET: Unable to open socket

**Explanation** The system was unable to initialize an IP connection for the Hot Standby protocol.

**Recommended Action** Make sure that there is at least one interface configured to run IP.

## STUN Error Messages

Serial tunneling error messages

**Error Message**

%STUN-3-BADCONN: CONN: bad connection ([dec]), peer: [chars]

%STUN-3-BADLENOP: [chars]: bad len or unknown op, op [dec], len [dec]

%STUN-3-BADMAGIC: [chars]: wrong magic, mine [hex], theirs [hex] ([dec])

%STUN-3-BADMAGICTCP: [chars]: peer [chars], wrong magic, min [hex], theirs [hex]

%STUN-3-BADPASSIVEOPEN: passive open from [inet] ([dec]) -> [dec] failed

%STUN-3-CONNILLSTATE: CONN: Peer [chars], illegal state [dec]

**Explanation** An internal software error has occurred.

**Recommended Action** If any of these messages recur, call your technical support representative for assistance.

**Error Message**

`%STUN-6-CONNOPENFAIL: CONN: peer [chars] open failed,  
[chars] [[dec]]`

**Explanation** An attempt to connect to a remote TCP STUN peer has failed.

**Recommended Action** Verify that the remote peer is accessible from this router, that it is running software capable of supporting STUN, and that it is configured correctly.

**Error Message**

`%STUN-6-ERR: [chars]: [chars]: [chars], op [hex], len  
[dec]`

**Explanation** An internal software error has occurred.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

**Error Message**

`%STUN-2-NOBUF: Interface [chars], no buffer available  
to [chars]`

**Explanation** A memory shortage existed at the time that the configuration command was issued. This condition is rare and, under normal conditions, temporary.

**Recommended Action** Reconfigure the STUN group. If memory shortages persist, call your technical support representative for assistance.

**Error Message**

`%STUN-3-NOPROTMEM: No memory for STUN protocol  
definition of [chars]`

**Explanation** The system does not have sufficient memory to define a new STUN schema.

**Recommended Action** This error message should only print when the router is critically short of memory. Call your technical support representative for assistance.

**System Error Messages**

**Error Message**

```
%STUN-3-NOTGEM: No memory for STUN protocol sdlc-tg
definition
```

**Explanation** A software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

```
%STUN-2-NOTGI: Please remove and redefine protocol
group [dec]
```

**Explanation** An internal error has occurred. The configuration is irregular.

**Recommended Action** Remove and reconfigure the STUN protocol group. Record the configuration and call your technical support representative for assistance.

**Error Message**

```
%STUN-6-OPENED: [chars]: peer [chars] opened,
[previous state [chars]]
%STUN-6-OPENING: CONN: opening peer [chars], [dec]
%STUN-6-PASSIVEOPEN: passive open [inet]([dec]) ->
[dec]
```

**Explanation** A connection attempt to a remote peer has completed successfully (OPENED, PASSIVE-OPEN) or is in the process of being opened (OPENING). This is good, expected behavior.

**Recommended Action** Informational message only. No action required.

**Error Message**

`%STUN-6-PEERSHUTDOWN: shutting down peer [chars] on [chars]`

**Explanation** A connection to a remote peer is being shut down. This is typically the result of user intervention in STUN reconfiguration or disabling. This is good, expected behavior.

**Recommended Action** Informational message only. No action required.

**Error Message**

`%STUN-4-PEERSTATE: Peer [chars], wrong state [dec] ([dec])`

**Explanation** An internal software error has occurred.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

**Error Message**

`%STUN-6-RECONNECT: PHDR: reconnect from peer [chars]`

**Explanation** A remote peer has reestablished a connection to this router.

**Recommended Action** Informational message only. No action required.

**Error Message**

`%STUN-3-SENDPUNT: [chars]: sent [chars] to [chars]`  
`%STUN-3-SENDPUNTTCP: [chars]: sent [chars] to ([dec])[inet]`

**Explanation** An internal software error has occurred.

**Recommended Action** If either of these messages recurs, call your technical support representative for assistance.

**System Error Messages**

---



**Error Message**

```
%STUN-6-TCPFINI: peer [chars] closed [previous state  
[chars]]
```

**Explanation** A remote peer has closed a STUN connection with this router.

**Recommended Action** Examine the other router to see why it closed this connection with this peer. (This can be caused by normal events, such as reconfiguration.)

**Error Message**

```
%STUN-6-TCPPEERSHUT: [chars] [chars], [inet]([dec])
```

**Explanation** This route has closed a STUN connection with a remote peer.

**Recommended Action** Examine this router to see why it closed this connection with this peer. (This can be caused by normal events, such as reconfiguration.)

## SUBSYS Error Messages

Software subsystem error messages

**Error Message**

```
%SUBSYS-2-BADCLASS: Bad subsystem class [dec] -  
ignoring subsystem
```

**Explanation** A software consistency check failed.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%SUBSYS-2-BADVERSION: Bad subsystem version number  
[dec] - ignoring subsystem

**Explanation** A software consistency check failed.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%SUBSYS-2-MISMATCH: Kernel and subsystem version  
differ [dec.dec]

**Explanation** A software consistency check failed.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%SUBSYS-2-NOTFOUND: Subsystem [chars] needs subsystem  
[chars] to start

**Explanation** A software consistency check failed.

**Recommended Action** Call your technical support representative for assistance.

## SYS Error Messages

Operating system error messages

### Error Message

%SYS-2-ALREADYFREE: Buffer [hex] already in free pool  
[chars]

%SYS-3-BADBLOCK: Bad block pointer [hex]

%SYS-3-BADDISP: Bad dispose code [hex] in [chars]

%SYS-3-BADFREEMAGIC: Corrupt free block at [hex]  
(magic [hex])

**Explanation** A block of memory is corrupt at the indicated location.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

### Error Message

%SYS-3-BADFREEPTRS: Bad [chars] pointer [hex] at [hex]  
([chars] = [hex])

**Explanation** A pointer in the block header at the indicated location is corrupt.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

### Error Message

%SYS-3-BADLINKTYPE: Unexpected linktype [dec]

**Explanation** A software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%SYS-2-BADLIST: Regular expression access check with bad list [dec]

**Explanation** A software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%SYS-3-BADMAGIC: Corrupt block at [hex] (magic [hex])

**Explanation** The free memory pool is corrupted.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%SYS-3-BADPARAM: Function [chars]: value [hex] passed in parameter [chars]

**Explanation** A software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

```
%SYS-2-BADPID: Bad pid [dec] for tty [t-line]

%SYS-2-BADPOOL: Attempt to return buffer with corrupt
pool pointer, ptr= [hex], pool= [hex]

%SYS-2-BADPOOLMAGIC: Attempt to use pool pointer with
corrupt header, pool= [hex]

%SYS-2-BADSHARE: Bad sharecount in [chars],
ptr=[hex],count=[hex]

%SYS-2-BADSTACK: Process [chars] has trashed stack,
old size [dec]

%SYS-6-BLKINFO: [chars]blk [hex], words [dec], alloc
[hex][chars] RZ offset [dec], dealloc [hex], rfcnt
[hex]

%SYS-2-CFORKLEV: cfork at level [dec]
```

**Explanation** An internal software error has occurred.

**Recommended Action** If any of these messages recur, call your technical support representative for assistance.

**Error Message**

```
%SYS-3-BADRESID: Clock hardware returned bad residual
[dec]
```

**Explanation** A software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

```
%SYS-2-BLOCKHUMG: Task hung with blocking disabled,
value = [hex]
```

**Explanation** A software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%SYS-2-CHUNKBOUNDS: Attempted to exceed freelist chunk bounds chunk [hex], data [hex],

**Explanation** A software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%SYS-5-CONFIG: Configured from [chars] by [chars]

%SYS-5-CONFIG\_I: Configured from [chars] by [inet]

%SYS-5-CONFIG\_L: Configured via LNM from [enet]

%SYS-5-CONFIG\_M: Configured via MOP from [chars] by [enet]

**Explanation** The router's configuration has been changed.

**Recommended Action** Notification messages only. No action required.

**Error Message**

%SYS-5-CONFIG\_NV: Non-volatile store configured from [chars] by [chars]

%SYS-5-CONFIG\_NV\_M: Non-volatile store configured via MOP from [chars] by [enet]

**Explanation** The configuration was written successfully through the Maintenance Operation Protocol (MOP).

**Recommended Action** No action required.

**Error Message**

%SYS-3-CONFIG\_NV\_ERR: Non-volatile store write error - configuration failed

**Explanation** The write of the nonvolatile configuration failed.

**Recommended Action** If this message recurs, contact your technical support representative for assistance.

**System Error Messages**

**Error Message**

%SYS-3-CPUHOG: Task ran for [dec] msec. Process = [chars], PC = [hex]

**Explanation** A software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%SYS-4-DUAL\_MESSAGE: SNMP system message request [dec] denied due to pending job

**Explanation** A software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%SYS-2-DUPEXPORT: Duplicate export vector [chars] registration attempt

**Explanation** An internal software error occurred.

**Recommended Action** If this message recurs, contact your technical support representative for assistance.

**Error Message**

%SYS-2-FREEBAD: Attempted to free memory at [hex], not part of buffer pool

%SYS-2-FREEFREE: Attempted to free unassigned memory at [hex], alloc [hex] dealloc [hex]

%SYS-2-GETBUF: Bad getbuffer, bytes= [dec]

%SYS-3-HARIKARI: Process [chars] top-level routine exited

%SYS-2-HEADER: Attempt to return buffer with invalid buffer header, ptr= [hex]

**Explanation** An internal software error has occurred.

**Recommended Action** If any of these messages recur, call your technical support representative for assistance.

**Error Message**

%SYS-2-INLIST: Buffer in list, ptr= [hex]

%SYS-2-INLIST1: Buffer in list, ptr= [hex], caller= [hex]

%SYS-2-INPUTQ: INPUTQ set, but no idb, ptr=[hex]

%SYS-2-INSCHED: [chars] within scheduler

%SYS-2-INTSCHED: [chars] at level [dec]

%SYS-3-INUSEFREE: Block [hex] on free list [dec] in use

**Explanation** An internal software error has occurred.

**Recommended Action** If any of these messages recur, call your technical support representative for assistance.



**Error Message**

%SYS-3-INVMEMINT: Invalid memory action ([chars]) at interrupt level

**Explanation** This message indicates that a memory allocation or deallocation was attempted from an interrupt handler.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

**Error Message**

%SYS-2-LINKED: Bad enqueue of [hex] in queue [hex]

%SYS-2-LINKED: Bad p\_dequeue of [hex] in queue [hex]

%SYS-2-LINKED: Bad p\_requeue of [hex] in queue [hex]

%SYS-2-LINKED: Bad requeue of [hex] in queue [hex]

%SYS-2-LOWMEM: Low memory debug exception (limit = [dec] free = [dec])

**Explanation** The router is running short on memory.

**Recommended Action** It may be necessary to free some memory by exiting a program. If this message recurs, call your technical support representative for assistance.

**Error Message**

%SYS-3-MSGLOST: [dec] messages lost due to queue overflow

**Explanation** A software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

```
%SYS-6-MTRACE: [chars]: addr, pc [hex], [hex] [hex],  
[hex] [hex], [hex] [hex], [hex] [hex], [hex] [hex],  
[hex] [hex], [hex] [hex], [hex]
```

**Explanation** The free memory pool is corrupted.

**Recommended Action** If this message recurs, contact your technical support representative for assistance.

**Error Message**

```
%SYS-2-NOBLOCK: [chars] with blocking disabled
```

**Explanation** An internal software error has occurred.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

**Error Message**

```
%SYS-6-NOBRIDGE: Bridging software not present
```

**Explanation** Your system is not equipped to be a bridge.

**Recommended Action** Install the bridging software option.

**Error Message**

```
%SYS-1-NOECO: WARNING: This 500-CS cannot run this  
version of software. Please contact Customer Service  
for upgrade information. tele: 1 (800) 553-NETS 1 (415)  
903-7208 email: cs-rep@cisco.com Hardware burned in  
address is %e
```

**Explanation** An Error Change Order (ECO) is needed.

**Recommended Action** Call your technical support representative for assistance.

**System Error Messages**

---

**Error Message**

%SYS-2-NOMEMFRG: Memory fragmentation check debug exception (fragment size [dec])

**Explanation** The system detected an error checking memory fragmentation.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

**Error Message**

%SYS-2-NOMEMORY: No memory available for [chars] [dec]

**Explanation** An operation could not be accomplished because of a low memory condition.

**Recommended Action** Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

**Error Message**

%SYS-3-NOPROC: Process table full

%SYS-2-NOTDEAD: Re-killing process [chars], pid [dec]

%SYS-2-NOTQ: p\_unqueue didn't find [hex] in queue [hex]

%SYS-2-NOTQ: unqueue didn't find [hex] in queue [hex]

%SYS-3-NULLIDB: Null idb in [chars]

**Explanation** An internal software error has occurred.

**Recommended Action** If any of these messages recur, call your technical support representative for assistance.

**Error Message**

%SYS-2-NOPROCESS: No such process [dec]

**Explanation** An internal software error has occurred.

**Recommended Action** If this message recurs, contact your technical support representative for assistance.

**Error Message**

%SYS-3-NZREFCNT: Block [hex] on free list [dec] with ref count [dec]

**Explanation** A block of memory in the free pool is actually in use. The number of processes using the memory block is indicated.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

**Error Message**

%SYS-5-OUTSETUP: Configuration file [chars] accepted, aborting setup

**Explanation** A configuration was accepted through the network, so the setup session will be aborted.

**Recommended Action** No action required.

**Error Message**

%SYS-3-OVERRUN: Block overrun at [hex] (redzone [hex])

**Explanation** An internal software error has occurred.

**Recommended Action** If this message recurs, contact your technical support representative for assistance.

**Error Message**

%SYS-1-OVERTEMP: System detected OVER TEMPERATURE condition.  
Please resolve cooling problem immediately!

**Explanation** The environmental monitor has detected a high temperature condition.

**Recommended Action** Make sure room temperature is not too high and that air flow to the card is not blocked. If this condition persists, the environmental monitor may shut the system down. Call your technical support representative for assistance, if necessary.

**System Error Messages**

---

**Error Message**

%SYS-2-PAKCLIP: Bad pak\_clip, bytes= [dec]

**Explanation** A software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%SYS-2-QCOUNT: Bad dequeue [hex] count [dec]

%SYS-2-QCOUNT: Bad p\_dequeue [hex] count [dec]

%SYS-2-QCOUNT: Bad p\_unqueue [hex] count [dec]

%SYS-2-QCOUNT: Bad unqueue [hex] count [dec]

%SYS-2-QINSERT: Unable to add [chars] to queue - no elements

%SYS-4-REGEXP: [chars]

**Explanation** An internal software error has occurred.

**Recommended Action** If any of these messages recur, call your technical support representative for assistance.

**Error Message**

%SYS-3-REGARG: Registry service [chars] has too many arguments

**Explanation** An internal software consistency check failed.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%SYS-3-REGCREA2: Attempt to create registry service [chars] twice

**Explanation** An internal software consistency check failed.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%SYS-3-REGDFLT: Attempt to add default twice to registry service

**Explanation** An internal software consistency check failed.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%SYS-3-REGNONE: Registry [dec] service [dec] doesn't exist - [chars]

**Explanation** An internal software consistency check failed.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%SYS-3-REGTYPE: Registry service [chars] is wrong type, should be [dec]

**Explanation** An internal software consistency check failed.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%SYS-5-RELOAD: Reload requested

%SYS-5-RESTART: System restarted -- [chars]

**Explanation** A reload or restart has been requested.

**Recommended Action** Notification messages only. No action required.

**System Error Messages**

---

**Error Message**

```
%SYS-4-RELOAD_ATTEMPT: Attempt via SNMP failed;  
system-shutdown not configured
```

**Explanation** A software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

```
%SYS-2-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-3-SOCKUNKN: Unknown socket protocol [dec]  
  
%SYS-2-SPEC: Trying to set unknown special character  
[dec] to [dec]  
  
%SYS-6-STACKLOW: Stack for [chars] [chars] running  
low, [dec]/[dec]
```

**Explanation** An internal software error has occurred.

**Recommended Action** If any of these messages recur, call your technical support representative for assistance.

**Error Message**

```
%SYS-3-SUPNONE: Registry [dec] doesn't exist
```

**Explanation** A software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%SYS-2-SUPNOT: Can't create Registry [chars]

**Explanation** An internal software consistency check failed.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%SYS-5-TABLEERR: [chars] table [chars] damaged:  
[chars]

**Explanation** An internal table entry has become corrupted.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%SYS-3-TTYMEM: Tty[t-line], no memory to save tty  
default parameters

**Explanation** The requested operation could not be accomplished because of a low memory condition.

**Recommended Action** Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

**Error Message**

%SYS-3-WRONGFREELIST: Block [hex], size [dec], on  
wrong free list ([dec], [dec])

**Explanation** A freed buffer has been placed on the wrong list of free buffers.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

**System Error Messages**

---



**Error Message**

%SYS-2-WRONGPOOL: Buffer [hex] found in pool [hex],  
should be in pool [hex]

**Explanation** A software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

## TAC Error Messages

Terminal Access Control protocol (TACACS) error messages

### Error Message

```
%TAC-6-SENDTMO: Send type [dec] to [inet] timed out
```

**Explanation** A background TACACS notification (enabled with the command **tacacs notify**) was not acknowledged by the TACACS server processor within the timeout period (5 minutes). The information contained in that notification has been lost. This may interfere with accounting or auditing on the server.

This condition arises when the TACACS server is misconfigured, has crashed, or has become unreachable via the network.

**Recommended Action** Check the TACACS server and the network attached to it.

### Error Message

```
%TAC-4-UNEXREP: Reply for non-existent request, [dec]  
on queue
```

**Explanation** The TACACS facility received a message it was not expecting. This may occur when a TACACS server sends duplicate responses or when it responds to a request that has already timed out. It also may be due to an internal software problem.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

## TCP Error Messages

Transmission Control Protocol error messages

### Error Message

```
%TCP-2-BUFFER: Tty[t-line], buffering bug
```

```
%TCP-2-PUTBYTE: Tty[t-line], tcp_putbyte() with  
blocking disabled
```

**Explanation** An internal software error has occurred.

**Recommended Action** If either of these messages recurs, call your technical support representative for assistance.

## TMQ Error Messages

Inbound Terminal Port Queuing error messages

### Error Message

```
%TMQ-3-NOTFOUND: TMQ, Attempt to delete entry not in  
queue
```

**Explanation** An attempt was made to delete an entry not in the queue.

**Recommended Action** Advisory message only. No action required.

## TN Error Messages

Telnet error messages

**Error Message**

`%TN-2-BADLOGIN: Bad login string pointer [hex]`

`%TN-3-BADSTATE: Illegal state [dec]`

`%TN-3-READLINE: Unknown return code [dec] from  
telnet_readline()`

**Explanation** An internal software error has occurred.

**Recommended Action** If any of these messages recur, call your technical support representative for assistance.

## TR Error Messages

Token Ring error messages

**Error Message**

`%TR-3-ASYNCUSE: Unit [dec], [chars], async in use`

**Explanation** Another internal process is communicating with the given Token Ring interface.

**Recommended Action** Wait 1 minute and try again. If the condition persists, it probably indicates an internal software error. Call your technical support representative for assistance.

**Error Message**

`%TR-4-BADADAPT: Unit [dec], adapter not responding  
[hex] [hex][hex] [hex]`

**Explanation** The CSC-R Token Ring interface is not responding to initialization.

**Recommended Action** Check the CSC-R Token Ring card's configuration and make sure it is in the correct slot. The CSC-R card is a Multibus master; it must be part of a contiguous group of bus master cards that includes the CPU. In most configurations the CSC-R Token Ring interface will be the card immediately adjacent to the CPU. If the interface is in the correct slot, this message indicates a probable hardware failure. Call your technical support representative for assistance.

## System Error Messages

**Error Message**

%TR-3-BADBRDGPARGS: Unit [dec], bad bridge parameters:  
bridge\_num=[dec], max\_rd= [dec]\nthisring=[dec],  
targetring=[dec]

%TR-3-BADBUFFSIZE: Unit [dec], bad buffersize = [dec]

%TR-3-BADFIRM: Unit [dec], Tokenring firmware download  
failed\n got [hex], expected [hex], at address  
[hex].[hex]

%TR-3-BADFIRMTYPE: Unit [dec], bad firmware type code  
during [chars]. type=[hex], fw=[hex]

%TR-3-BADFUNC: Unit [dec], bad functional  
address=[hex], ring mode=[hex]

**Explanation** An internal software error has occurred.

**Recommended Action** If any of these messages recur, call your  
technical support representative for assistance.

**Error Message**

%TR-3-BADHEADER: RX - Unit [dec]: type [dec], size  
[hex], use [hex] flags [hex]

**Explanation** The system has detected corrupted data from the Token  
Ring interface card (CSC2R/1R and CSC-R16M only). There may be a  
hardware problem.

**Recommended Action** Call your technical support representative for  
assistance.

**Error Message**

%TR-3-BADMUL: Unit [dec], Can't set TR address to  
hardware multicast address [enet]

**Explanation** An attempt was made to set the Token Ring interface  
MAC address to a reserved multicast address.

**Recommended Action** Check your configuration. Make sure that your  
XNS and/or Novell Token Ring addresses have not inadvertently been  
set to reserved multicast addresses.

**Error Message**

```
%TR-3-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-BADSLLOT: Unit [dec], Slot [dec] does not exist.
```

**Explanation** This error message pertains only to the Cisco 4000. It is seen when software tries to access (discover) a network interface module (NIM) that is not in slot 1, 2, or 3. The software stalls trying to access the nonexistent slot. This message could indicate a card error.

**Recommended Action** If this message recurs, call your technical support representative for assistance or a replacement card.

**Error Message**

```
%TR-3-BADSTART: Unit [dec], Start completion and wrong  
idb state -state= [dec]
```

**Explanation** An internal software error has occurred.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

**Error Message**

```
%TR-3-BADUNIT: Bad unit number [dec]
```

**Explanation** This error message pertains only to the IGS. When displayed, it indicates that the system cannot find the chipset registers where it expects them to be. This is most likely a hardware error.

**Recommended Action** If this message recurs, call your technical support representative for assistance. It will be necessary to check the hardware unit configuration.

**System Error Messages**

**Error Message**

%TR-4-BKGND: Unit [dec], bkgnd int: last packet out  
[dec]ms

%TR-4-BKGNDINT: Unit [dec], bkgnd int: [hex][hex]  
[hex][hex][hex][hex] [hex][hex]

**Explanation** An internal software error has occurred.

**Recommended Action** If either of these messages recur, call your technical support representative for assistance.

**Error Message**

%TR-3-BOGUSDATA: [hex] [hex] [hex] [hex] [hex] [hex]  
[hex] [hex]

**Explanation** This message displays the first eight bytes of frame data if the data length is invalid. It is the second part of the %TR-3-BOGUSLENGTH error message that follows.

**Recommended Action** See recommended action for the %TR-3-BOGUSLENGTH error message.

**Error Message**

%TR-3-BOGUSLENGTH: Unit [dec], bad input length [dec],  
[chars] code.

**Explanation** This is the first message displayed when the frame data length is invalid. It is unique to the CSC-R16 Token Ring card for all system versions.

**Recommended Action** Display of both the %TR-3-BOGUSLENGTH and %TR-3-BOGUSDATA error messages indicates a serious problem on the interface between the Token Ring chipset, the SBE16 card, and the system driver. The engineering developers should be notified. Call your technical support representative for assistance.

**Error Message**

%TR-3-COMPFAIL: Unit [dec], Tbuf completion failure, result [hex]

%TR-3-FILTFAIL: Unit [dec], SRB filter set failed: [hex] [hex][hex] [hex] (blk 0x[hex]) downing

%TR-3-GETCONF: Unit [dec], get\_config failed, result [hex] [hex]

**Explanation** An internal software error has occurred.

**Recommended Action** If any of these messages recur, call your technical support representative for assistance.

**Error Message**

%TR-3-INCOM: Unit [dec], incompatible firmware: system [hex],interface [hex]

**Explanation** The Token Ring interface contains firmware that is incompatible with the system software.

**Recommended Action** Call your technical support representative to upgrade the Token Ring Monitor firmware, the system software, or both.

**Error Message**

%TR-3-INITFAIL: Unit [dec], init failed. result code=[hex], error code=[hex]

**Explanation** The Token Ring hardware has failed to initialize properly.

**Recommended Action** Copy the error message exactly as it appears and report it to your technical support representative.

**Error Message**

%TR-4-INTFAIL: Unit [dec] interface failure: [hex] [hex] [hex],idb state [dec]

**Explanation** The Token Ring Monitor firmware has detected a fatal error due either to an internal software problem or to a hardware failure.

**Recommended Action** Copy the error message exactly as it appears and report it to your technical support representative.

**System Error Messages**



**Error Message**

`%TR-3-MADGETX: Unit [dec], lost packet using Transmit Descriptor.`

**Explanation** This error message pertains only to the Cisco 4000. When displayed, it indicates that a packet was lost inside the Madge firmware, and the software lost the pointer to it.

**Recommended Action** This message indicates a software problem on the card. If this message recurs, call your technical support representative for assistance or a replacement card.

**Error Message**

`%TR-3-MODEFAIL: Unit [dec], change mode failed. result code=[hex], error code=[hex]`

`%TR-3-MODFAIL: Unit [dec], tra_modify failed, result [hex] [hex]`

`%TR-3-NOFIRM: Unit [dec], no TMS380 firmware present. eagle=[hex], magic=[hex]`

**Explanation** An internal hardware or software error has occurred.

**Recommended Action** Copy the error message exactly as it appears and report it to your technical support representative.

**Error Message**

`%TR-3-NOMEMORY: Unit [dec], no memory for [chars]`

**Explanation** The requested operation could not be accomplished because of a low memory condition.

**Recommended Action** Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

**Error Message**

%TR-4-NOMOREPAGES: Unit [dec], Out of Pages for [chars].

**Explanation** This error message pertains only to the Cisco 4000. When displayed, it indicates that the ability to switch the receive buffers for the Token Ring has been halted due to an insufficient amount of memory.

**Recommended Action** Reduce other system activity to ease memory demands and then reset the Token Ring interface by entering a **clear interface tokenring** command. If these actions do not solve the problem, upgrade to a larger memory configuration or call your technical support representative for assistance.

**Error Message**

%TR-3-NOPAK: Unit [dec], Tbuf completion and no pakout

**Explanation** An internal hardware or software error has occurred.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

**Error Message**

%TR-3-OLDTRIF: Obsolete firmware in multibus TR unit [dec] - does not support fast switching

**Explanation** A firmware upgrade is needed.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

`%TR-3-OPENFAIL: Unit [dec], open failed: check the lobe cable DB-9 connection`

**Explanation** The Token Ring interface was unable to insert itself into the ring. This is an indication of a busy or broken ring. The first character string in this error message indicates the stage of initialization at which the error occurred, and the second describes the error.

**Recommended Action** Try to open the interface again. This generally can be accomplished by issuing the **clear interface tokenring** command. If the error message recurs, call your technical support representative for assistance.

**Error Message**

`%TR-3-OPENFAIL2: Unit [dec], open failed: check the lobe cable connection.`

**Explanation** The Token Ring interface was unable to insert itself into the ring, and the error code returned indicates a wiring problem.

**Recommended Action** Check the cable connecting the router to the Token Ring MAU, and try to open the interface again. This generally can be accomplished by issuing the **clear interface tokenring** command. If the error message recurs, call your technical support representative for assistance.

**Error Message**

`%TR-3-PANIC: Unit [dec], panic [hex] [hex] [hex]`

**Explanation** The Token Ring monitor firmware has detected a fatal error that indicates an impending interface failure.

**Recommended Action** Copy the error message and the interface message exactly as they appear and then report them to your technical support representative.

**Error Message**

```
%TR-3-PANICINF: Unit [dec], PI [hex] [hex] [hex]
[hex][hex] [hex]
```

**Explanation** This message is similar to the %TR-3-PANIC error message, but indicates a nonfatal error. This message appears in very unusual situations that should not arise in normal operation.

**Recommended Action** Copy the error message exactly as it appears and report it to your technical support representative.

**Error Message**

```
%TR-3-PANICTYPE: Unit [dec], [chars] error
```

**Explanation** This message is similar to the %TR-3-PANIC error message, but indicates a nonfatal error. This message appears in very unusual situations that should not arise in normal operation.

**Recommended Action** Copy the error message exactly as it appears and report it to your technical support representative.

**Error Message**

```
%TR-3-RESETFAIL: Unit [dec], reset failed, error code
[hex]
```

**Explanation** An internal software error has occurred.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

**Error Message**

```
%TR-3-RESETFAIL2: Unit [dec], reset failed, auxiliary
processor init failed
```

**Explanation** This message isolates a particular RESETFAIL condition from several other reset failure conditions. It is unique to the CSC-R16 Token Ring card for all system versions and indicates a state problem.

**Recommended Action** Call your technical support representative for assistance.

**System Error Messages**

---

**Error Message**

%TR-3-RIFBADMAGIC: Invalid magic number ([hex]) in RIF [chars] table entry [hex]

%TR-3-RIFTBLTRASH: Trashed [chars] RIF table entry [hex] found and zeroed

**Explanation** An internal software error has occurred.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

**Error Message**

%TR-3-SETBRIDGEFAIL: Unit [dec], set bridge failed (code %#x)

**Explanation** A hardware error has occurred. The source routing accelerator (SRA) chip on the Token Ring card could not be initialized.

**Recommended Action** Call your technical support representative for assistance or a replacement card.

**Error Message**

%TR-3-SETFAIL: Unit [dec], couldn't set interface to physical address [enet]

**Explanation** An illegal MAC address was specified for this interface.

**Recommended Action** Normally the Token Ring interface uses the burned-in address contained in a PROM on the board. However, certain protocol stacks require the MAC address to be modified to an illegal value. Check your configuration for possible problems. If this message recurs, call your technical support representative.

**Error Message**

%TR-3-SETFUNFAIL: Unit [dec], set functional address failed (code [hex])

%TR-3-SETGRPFAIL: Unit [dec], set group address failed (code [hex])

%TR-3-SETOPTFAIL: Unit [dec], set open options failed (code [hex])

%TR-3-SMTSTATFAIL: Unit [dec], get\_smt: get smt stats failed - result [hex]

**Explanation** An internal software error has occurred.

**Recommended Action** If any of these messages recur, call your technical support representative for assistance.

**Error Message**

%TR-4-SNKBRIDG: Unit [dec], removing invalid bridge

**Explanation** The system could not start a Token Ring source-route bridge because the interface in question does not have the appropriate Token Ring Monitor firmware or hardware.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%TR-3-STARTFAILED: Unit [dec], start failed, result [hex],reason [hex]

**Explanation** The Token Ring Monitor firmware attempted to insert the system into the ring, and the chipset detected a nonstandard fatal error.

**Recommended Action** This message indicates a problem with the Token Ring chipset hardware. Call your technical support representative for assistance.

**System Error Messages**

---

**Error Message**

%TR-3-STARTFAILED2: Unit [dec], start failed,  
auxiliary processor init failed.

**Explanation** This error message isolates a particular STARTFAIL condition from several other reset failure conditions. It is unique to the CSC-R16 Token Ring card for all system versions and indicates a state problem.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%TR-6-STATE: TR[dec]: Ring Status: [chars]

**Explanation** This message is displayed when the Token Ring's status has changed as determined by the chipset. This information also is used to automatically determine whether the interface is still usable to propagate network traffic.

**Recommended Action** Informational message only. No action required.

**Error Message**

%TR-3-STATFAIL: Unit [dec], get\_static: get stats  
failed - Async: [hex] [hex] [hex] [hex]

**Explanation** An internal software error has occurred.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

**Error Message**

%TR-6-STATRING: TR[dec]: Ring Status: [chars] [chars]  
([hex]) LIV [hex]

**Explanation** This message is displayed when the Token Ring's status has changed as determined by the chipset. This information also is used to automatically determine whether the interface is still usable to propagate network traffic. The meaning of each status code is shown in Table 4.

**Recommended Action** Check the Ring for the indicated condition.

**Table 4 Token Ring Status Codes**

Code	Explanation	Fatal
0x8000	Signal loss	Yes
0x4000	Hard error	Yes
0x2000	Soft error	No
0x1000	Transmit beacon	Yes
0x0800	Lobe wire fault	Yes
0x0400	Auto removal error	Yes
0x0100	Receive request removed	Yes
0x0080	Counter overflow	No
0x0040	Single station	No
0x0020	Ring recovery	No



**Error Message**

```
%TR-3-TRACMD: tra_cmd: unit [dec] bad state: cmd [hex]
[hex],result [hex] [hex] (blk [hex], iob
[hex])
```

```
%TR-4-UNKNOWNCOMP: Unit [dec], Unknown command
completion:cmd [hex], rslt [hex]
```

```
%TR-3-UNKNOWNNT2M: Unit [dec], Unknown t2m command
[hex] [hex]
```

**Explanation** An internal software error has occurred.

**Recommended Action** If any of these messages recur, call your technical support representative for assistance.

**Error Message**

```
%TR-3-WIREFAULT: Unit [dec], wire fault: check the
lobe cable MAU connection
```

**Explanation** The Token Ring hardware is reporting a wire fault condition.

**Recommended Action** Check the cable connecting the router to the Token Ring MAU.

## TUN Error Messages

Tunnel error messages

**Error Message**

```
%TUN-4-BADOUTMODE: Interface [chars] unsupported
output mode [dec] [chars]
```

**Explanation** The tunnel interface was set to an encapsulation mode that is not supported.

**Recommended Action** Report the problem to your technical support representative and correct your configuration.

**Error Message**

%TUN-4-RECURDOWN: [chars] temporarily disabled due to recursive routing

**Explanation** When routing the same payload protocol over a carrier protocol (tunneling IP over IP, for example), it is possible to misconfigure your network so that you will try to route to the tunnel destination address via the tunnel. This is usually caused by a misconfiguration of the tunnel or a temporary instability due to route flapping elsewhere in your network. It is important to take steps to ensure that routing information between the carrier networks and the payload networks is not allowed to mix. If the router discovers a recursive routing problem, it will temporarily shut down the tunnel interface for a few minutes so that the situation that is causing this problem can resolve itself as routing protocols converge. If the problem is caused by misconfiguration, the link may oscillate indefinitely.

**Recommended Action** No action required.

**Error Message**

%TUN-4-RECURSHUT: [chars] administratively disabled due to recursive routing

**Explanation** If the recursive routing situation reported by the RECURDOWN message is not cleared up after ten bounces, the tunnel interface will be administratively shut down to avoid further flapping.

**Recommended Action** Determine the cause of the recursive routing situation, correct it, and then manually bring the interface back up using the **no shutdown** command.

## UCODE Error Messages

Microcode error messages

### Error Message

%UCODE-3-BADCHKSUM: Bad checksum in [chars], found [hex] expected [hex]

**Explanation** The microcode file is corrupted in some way; the checksum computed after reading the file from Flash does not match the one in the file. The file will not be downloaded, and the onboard ROM microcode will be used instead.

**Recommended Action** Reload the microcode. If the message recurs, call your technical support representative for assistance.

### Error Message

%UCODE-3-HDRCORRUPT: Ucode header corrupted in [chars], found [hex] expected [hex]

**Explanation** The microcode file is corrupted in some way; the checksum computed after reading the file from Flash does not match the one in the file. The file will not be downloaded, and the onboard ROM microcode will be used instead.

**Recommended Action** Reload the microcode. If the message recurs, call your technical support representative for assistance.

### Error Message

%UCODE-3-LDFAIL: Unable to download ucode [chars] in slot [dec], installed ucode loaded

**Explanation** For some reason, the microcode file specified by the configuration is not suitable for downloading, or another error has occurred. The onboard ROM microcode will be loaded so the interface can remain operational.

**Recommended Action** Attempt to reload the microcode. If the message recurs, call your technical support representative for assistance.

**Error Message**

`%UCODE-3-NOFILE: Ucode file [chars] not found,  
installed ucode loaded in slot [dec]`

**Explanation** The file specified by the configuration was not found in Flash. The onboard ROM microcode will be loaded so the interface can remain operational.

**Recommended Action** Use **show flash** to determine if the file is located in Flash. If the file is there, attempt to reload the microcode. If the message recurs, call your technical support representative for assistance.

**Error Message**

`%UCODE-3-OLDHARD: Ucode file [chars] requires [chars]  
version [dec].[dec] hardware or later`

**Explanation** The microcode specified requires a more recent version of the hardware than it found. The onboard ROM microcode will be loaded instead.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

`%UCODE-3-RDFAIL: Unable to read ucode file [chars] from  
flash`

**Explanation** For some reason, the microcode file was not read from Flash. Flash might be locked by another process or otherwise unavailable.

**Recommended Action** Use the **show flash** command to determine whether Flash is in use and issue another **microcode reload** when Flash is free. If the message recurs, call your technical support representative for assistance.

**System Error Messages**

---

**Error Message**

%UCODE-3-TOOBIG: File [chars] at length [dec] is too long for buffer size [dec]

**Explanation** The file is too large for the buffer. The onboard ROM microcode will be loaded.

**Recommended Action** If the error message recurs after the onboard ROM microcode has been loaded, call your technical support representative for assistance.

**Error Message**

%UCODE-3-WRONGHARD: [chars] is [chars] ucode not [chars], microcode/hardware mismatch

**Explanation** The specified microcode file is for a different interface processor than specified in the configuration. The user has made a configuration error. The onboard ROM microcode will be loaded.

**Recommended Action** Reenter your microcode configuration command after confirming the interface type and reload the microcode.

## UTIL Error Messages

Utility error messages

**Error Message**

%UTIL-2-RANGERET: list [hex] no memory, can't return range [dec] [dec]

**Explanation** A memory overflow error has occurred.

**Recommended Action** Investigate memory usage. If memory usage is abnormal, call your technical support representative for assistance. Otherwise, increase router memory.

**Error Message**

%UTIL-2-RANGEDUP: list [hex] already contains range [dec] [dec]

**Explanation** A software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%UTIL-3-RANGEINVERT: list [hex] low [dec] > high [dec]

**Explanation** A software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

## VINES Error Messages

Banyan Virtual Integrated Network Service error messages

**Error Message**

%VINES-2-BADPARAM: [chars] called with [chars] parameter set to [chars]

**Explanation** One of the VINES lookup functions was called with an illegal argument.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%VINES-2-CACHEFAILED: Cannot build cache entry ([dec] bytes) for [v-name] on [chars]

**Explanation** The cache population routing for VINES fast switching has determined that the MAC header on a packet is too large to fit into the cache.

**Recommended Action** Call your technical support representative for assistance.

## System Error Messages

**Error Message**

%VINES-2-CACHEUNSUPP: Caching of [chars] not supported on [chars]

**Explanation** The cache population routing for VINES fast switching has been called for an interface that does not support VINES fast switching.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%VINES-2-CONSISTENCY: Error [chars]

**Explanation** The VINES code has run into a situation that should not happen. For example, an IPC port number needs to be allocated, but all 65535 port numbers are currently in use.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%VINES-2-CORRUPTENTRY: Detected a corrupted entry in the [chars] table

**Explanation** The VINES code has detected that an internal table entry has become corrupted.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%VINES-2-DUPADDR: Duplicate address detected on interface [chars]

**Explanation** The router has detected that its VINES address is being used by another router.

**Recommended Action** Identify the other router that is using this address by manual inspection of the routers. Issue the command **vines routing recompute** on both routers. If a router does not support

the recompute keyword, then on that router you must disable VINES, write the configuration to memory, reboot the router, and then reconfigure VINES.

**Error Message**

```
%VINES-2-ENCAPFAILED: Encapsulation failed for  
[v-name] via [v-name] on [chars]
```

**Explanation** The cache population routing for VINES fast switching encountered an encapsulation failure when building a cache entry for a neighbor.

**Recommended Action** Examine your configuration for causes of the encapsulation failure. Look for missing **map** statements, interfaces that have gone down, and so on.

**Error Message**

```
%VINES-6-FNNOTFOUND: [chars] service [chars] routine  
missing [chars] vector.
```

**Explanation** There is an inconsistency in the static VINES data structures for handling application-layer packets.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

```
%VINES-2-INVALIDPATH: Bad [chars] in path for neighbor  
entry [v-name]
```

**Explanation** While searching the neighbor table, the code determined that a pointer that should point to a VINES path structure actually points to some other structure.

**Recommended Action** Call your technical support representative for assistance.

**System Error Messages**

---



**Error Message**

`%VINES-2-INVALIDROUTE: Bad [chars] in route for server entry [v-name]`

**Explanation** While searching the routing table, the code determined that a pointer that should point to a VINES route structure actually points to some other structure.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

`%VINES-6-IPCNOROUTINE: IPC port [dec] registered without an upcall [chars]`

**Explanation** There is an inconsistency in the active VINES data structure for handling IPC DATA messages. A message was received for a port that should have a listener, but the listener routine cannot be found.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

`%VINES-2-NEIGHBOR: vines_update called with null neighbor`

**Explanation** An internal software error has occurred.

**Recommended Action** If this message recurs, call your technical support representative for assistance.

**Error Message**

`%VINES-2-NOBUFFERS: No buffers available for [chars]`

**Explanation** There were no buffers available to send a packet.

**Recommended Action** Examine your system for memory or buffer leaks.

**Error Message**

`%VINES-2-NOMEMORY: No memory available for [chars]`

**Explanation** The requested operation could not be accomplished because of a low memory condition.

**Recommended Action** Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

**Error Message**

`%VINES-2-NOENCAP: Encapsulation failed on [chars], no vencap routine`

**Explanation** The VINES code tried to send a packet on an interface that does not have a new encapsulation routine.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

`%VINES-6-RPCNOSERVICE: IPC port [dec] registered without a service.`

**Explanation** There is an inconsistency in the active VINES data structure for handling Net RPC messages. A message was received for a port that should have a service description, but that service description cannot be found.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

`%VINES-6-RTNNOTFOUND: [chars] service [chars] routine not found while [chars].`

**Explanation** There is an inconsistency in the active VINES service description data structures. A service handler routine cannot find the description of its own service.

**Recommended Action** Call your technical support representative for assistance.

**System Error Messages**

## X25 Error Messages

X.25 error messages

### Error Message

%X25-3-BADCONFIG: Interface [chars], X.25 [chars],  
current configuration retained.

**Explanation** The interface's X.25 configuration is not valid; the existing configuration was not changed.

**Recommended Action** Verify the following:

- The interface's switched virtual circuit ranges do not overlap; for nonzero values,  $lic \leq hic < ltc \leq htc < loc \leq hoc$ . (For more information, refer to "Configuring Virtual Circuit Ranges" in the *Router Products Configuration Guide*.)
- If an incoming-only range is defined, check that it is numerically less than the two-way range.
- If an outgoing-only range is defined, check that it is numerically greater than the two-way range.
- No virtual circuit high/low parameter is zero unless its partner low/high parameter is also zero.
- The default window sizes are less than the interface modulo.

**Error Message**

%X25-4-BADUPCALL: Interface [chars], Unexpected call ([chars]) from LLC2 DTE= [enet]

%X25-4-DEBUG\_LCI: LCI deleted at interrupt time

%X25-2-ILLP4: Interface [chars], Illegal state [chars] when P4

%X25-3-INTIMEQ: Interface [chars], LCN [dec] already in timer queue, new time [dec]

%X25-3-NOLCI: Interface [chars], Delete: lci [dec] not found in [chars] table

%X25-3-NOTFINDBH: Can't find bfe host address [inet] to delete

%X25-3-NOTFINDI: Can't find address [inet] to delete

%X25-3-NOTFINDS: Can't find address [chars] to delete

%X25-3-SPURD1: Spurious D1 timer wakeup on LCI [dec]

**Explanation** An internal software error has occurred.

**Recommended Action** If any of these messages recur, call your technical support representative for assistance.

**Error Message**

%X25-4-LARGEPKSIZE: Interface [chars], [chars] packet sizes [dec]/[dec] too large; lower values will be negotiated.

**Explanation** The interface's default packet sizes or outgoing packet size facility values are too large to be carried by LAPB.

**Recommended Action** The router will negotiate lower packet size values automatically. The LAPB N1 value should be increased. For example, for an X.25 maximum packet size of 1024, modulo 8 X.25 operation will add 3 bytes of overhead and modulo 8 LAPB operation will add 4 bytes of overhead (the two bytes of CRC are defined to be included). This means that N1 must be at least  $1031 \text{ bytes} * 8 = 8248$ .

**System Error Messages**

**Error Message**

%X25-3-LCIBOGUS: in x25\_timer NULL lci-idb [hex]

**Explanation** An internal software error has occurred.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%X25-5-NOBUF: Interface [chars] LCI [dec] [chars]

**Explanation** This is a warning only (the compressed packet was not lost). However, an X.25 packet layer RNR (wait) was generated and packet-level transmission on the LCN will not resume (RR issued) until a decompression buffer becomes available.

**Recommended Action** If this message occurs frequently, you may need to modify the buffer pool. Call your technical support representative for assistance.

**Error Message**

%X25-5-NOMEM: Interface [chars] LCI [dec] NO memory for dictionary

**Explanation** The 14K PBP history dictionaries could not be allocated. PBP compression is not enabled.

**Recommended Action** Call your technical support representative for assistance.

**Error Message**

%X25-4-PARTIALMAP: Interface [chars], [chars] encapsulation call from [chars] partially mapped to [chars]

**Explanation** An incoming X.25 call specified a protocol that was assigned to a multiprotocol map; the VC will not be able to carry the full set of protocols specified by the map.

**Recommended Action** Modify the configuration of the router or the far host to match the encapsulation method used.

**Error Message**

```
%X25-3-PVCBAD: Interface [chars], PVC [dec], [chars]
```

**Explanation** A switched PVC cannot be connected. The final [chars] text string in the message represents the state of the PVC. These text strings can also appear in **show x25-vc** output. For more information, refer to the **show x25-vc** documentation in the *Router Products Command Reference* publication.

**Recommended Action** Validate the configuration of the PVCs at both ends of the connection, and reconfigure them if necessary.

**Error Message**

```
%X25-3-PVCDELETE: LCI for PVC [dec] being deleted!
```

**Explanation** A PVC was using an **x25 map** entry that was deleted or the interface configuration changed to make the PVC number illegal; this forces the deletion of the PVC.

**Recommended Action** No action required. Note that some attached equipment may object to an inability to use the deleted PVC.

**Error Message**

```
%X25-4-RANGEUNUSED: Interface [chars], [chars] VC  
range  
unused; set limits to zero
```

**Explanation** An outgoing-only or incoming-only virtual circuit range exactly overlaps the two-way virtual circuit range. This was the former method for specifying that a virtual circuit range was not used. The current method is to set the range limits to zero.

**Recommended Action** Use the privileged **write memory** command to write the configuration to memory. This will store the modified (zero) range limits.

**System Error Messages**

**Error Message**

```
%X25-3-SIZEBAD: Interface [chars] LCI [dec]  
Decompression size error
```

**Explanation** An internal software error has occurred. The PBP header has an uncompressed packet size field. Each uncompressed packet size is checked against this field.

**Recommended Action** Contact your technical support representative for assistance.

**Error Message**

```
%X25-3-SYNCBAD: Interface [chars] LCI [dec]  
Decompression sync error. Expected [dec], got [dec]
```

**Explanation** An internal software error has occurred. The PBP header has a sync field. The sync field (8 bits) is checked on each received packet.

**Recommended Action** Contact your technical support representative for assistance.

**Error Message**

```
%X25-4-VCLOSTSYNC: Interface [chars], VC [dec] TCP  
connection [chars]
```

**Explanation** An X.25 circuit that is being tunneled over a TCP connection between routers was cleared ungracefully. The last [chars] text string in the message can take one of two forms. If the text string is “closed unexpectedly,” the router at the remote end of the connection has been rebooted, or the connection has failed. If the text string is “connection corrupted,” it is likely that the connection was made to a router running an older software release.

**Recommended Action** If the text string is “closed unexpectedly,” reestablish the connection after the remote router or intervening network is operational. If the text string is “connection corrupted,” upgrade the router at the other end of the connection to a more recent software release.

**Error Message**

%X25-3-VERSIONBAD: Interface [chars] LCI [dec]  
Compression Version mismatch. Expected [hex]; received  
[hex]

**Explanation** An internal software error has occurred. The PBP header has a mismatched version field. The version is checked on each received packet.

**Recommended Action** Call your technical support representative for assistance.

**XNS Error Messages**

Xerox Network Services error messages

**Error Message**

%XNS-3-BADPATHS: Invalid number of paths ([dec]) for  
[dec]

%XNS-2-BADROUTE: Error [chars] route - null table

**Explanation** An internal software error has occurred.

**Recommended Action** If any of these messages recur, call your technical support representative for assistance.

**Recommended Action**



## Miscellaneous Error Messages

---

This section covers other types of error messages that you may encounter, such as bus, parity, timeout, unexpected, and unknown error messages.

These error messages result when the system image crashes, either from a hardware or a software failure. To access these messages, use the bootstrap program as described in the section “System Bootstrap Diagnostics” in either the *AGS+ Hardware Installation and Maintenance* or the *ASM-CS Hardware Installation and Maintenance* publications.

When you encounter a timeout, bus error, or unknown error message, you must run the **k** stack trace command at the bootstrap mode prompt (>).

In the following example, a timeout error message appears, the **k** stack trace command is run, but no stack trace results.

```
Timeout (control reg=0xCF10) Error, address: 0xFFFFFFFF8 \
at 0x317D49E (PC)
>k
No stack to dump (NULL frame pointer)
```

In the following example an unknown error message appears, the **k** stack trace command is run, and a stack trace results.

```
Unknown (control reg=0x10) Error, address: 0xD0D0D0D at
0x313DC22 (PC)
>k
Current PC: 0x313DC22
FP: 0xE6620 RA: 0x31411A8
FP: 0xE6634 RA: 0x3123D1C
FP: 0xE6650 RA: 0x312303A
FP: 0xE6668 RA: 0x3133664
FP: 0xE667C RA: 0x31337D2
FP: 0xE6694 RA: 0x31349DA
FP: 0xE66A0 RA: 0x3014B4C
```

Table 5 describes the fields in this sample stack trace.

**Table 5 Stack Trace Fields**

Field	Description
Current PC: 0x313DC22	Address at which the failure occurred. This address is also called the program counter (PC).
FP: 0xE6620	Stack frame pointer.
RA: 0x31411A8	Program counter of calling function saved in stack frame. This value is used to trace the flow of software function calls leading to the failure.

After you obtain the stack trace, use the **i** (initialize) command before you manually boot up the system image. Then use the **show version** command (when possible) to identify the software release and version number for use by technical staff.

On systems that have a hardware or a virtual (software) configuration register, and the boot bits (lowest four bits) are set to a value greater than 0, the system will repeatedly try to boot up the appropriate system image from resident ROMs, Flash memory, or a server over the network. If the booting is successful, the system prompt appears. You then can use the **show stack** command to obtain the stack trace.

In cases where the router crashes repeatedly, send a Break character from the console keyboard to obtain the bootstrap mode prompt. Then modify the configuration register boot bits to zero, enter the **i** (initialize) command, and manually attempt to bootstrap the system image. If it crashes, use the **k** stack trace command.

#### **Error Message**

```
Bus Error control register: [hex]
non-local memory transaction timeout
Bus Error, address: [hex] at [hex] (PC)
```

**Explanation** An invalid memory address is accessed, either because of a software bug or because a boot of an incompatible software image was attempted.

**Recommended Action** If the error occurred when your tried to boot up a system image over the network or from reprogrammed Flash memory, a probable reason could be the use of a wrong or incompatible system

#### **Miscellaneous Error Messages**

image. Look in the appropriate documentation to find out which system image to use. If you still need assistance, contact your technical support representative with the following details:

- Name of the system image file used for booting (as obtained from the technical support representative)
- Product name and configuration
- **show version** output from any bootable ROM-based image available on the system (a bootstrap image, for example)

If the error occurred while trying to boot up a built-in ROM-based image, contact your technical support representative with the following details:

- Product name and configuration
- Any hardware/software upgrades that were made prior to the failure
- Anything else that you think will help your technical support representative diagnose the problem
- Any stack trace, if obtainable, using the **k** command at the bootstrap prompt (<)

If the error occurred while the system was operational, contact your technical support representative after gathering the following information:

- Any stack trace obtained using the **k** command at the bootstrap mode prompt (>); or if the system successfully rebooted itself, **show stack** output
- **show version** output obtained after rebooting the system image in which the failure occurred

**Error Message**

Bus Error control register: [hex]  
ram byte ([value]) parity error  
Bus Error, address: [hex] at [hex] (PC)

**Explanation** Memory corruption or failure has occurred, most likely because of a hardware problem or by disturbances such as power line problems.

**Recommended Action** Reboot the system and observe whether the problem recurs. Also ensure that the power line has appropriate protection equipment. If the problem is a one-time occurrence, the cause could be a power line disturbance.

**Error Message**

Bus Error control register: [hex]  
system overtemp  
Bus Error, address: [hex] at [hex] (PC)

**Explanation** Temperature exceeded the operating range, most likely because of a ventilation, air-conditioning, or hardware problem.

**Recommended Action** Power off the system and give it time to cool. Check room ventilation and air conditioning. Also ensure that system air-flow grids are not blocked and that blowers are operational. Call your technical support representative if a blower needs replacement.

**Error Message**

Local Timeout (control reg=[hex]) Error, address:  
[hex] at [hex] (PC)

**Explanation** An invalid memory address is accessed, either because of a software bug or because a boot of an incompatible software image was attempted.

**Recommended Action** Refer to the Recommended Action for the first “Bus Error control register” message in this section.

**Miscellaneous Error Messages**

**Error Message**

Multibus Timeout (control reg=[hex]) Error, address:  
[hex] at [hex] (PC)

**Explanation** An invalid memory address is accessed, either because of a software bug or because of incompatible microcode in a multibus card.

**Recommended Action** Reseat the card. If this message recurs, call your technical support representative for assistance.

**Error Message**

Parity (control reg=[hex]) Error, address: [hex] at  
[hex] (PC)

**Explanation** Memory corruption or failure has occurred, most likely because of a hardware problem. Disturbances such as power line problems are also possibilities.

**Recommended Action** Reboot the system and observe whether the problem recurs. Also ensure that the power line has appropriate protection equipment. If the problem is a one-time occurrence, the cause could be a power line disturbance.

If this message recurs, call your technical support representative for assistance.

**Error Message**

Shared Memory Parity Error  
shared memory control register = [hex]  
error caused by slot [dec] access in byte(s) [dec]

Shared Memory Parity Error  
shared memory control register = [hex]  
error caused by MPU access in byte(s) [dec]

**Explanation** Shared (I/O) memory failure or corruption occurred during access by the processor. This problem is most likely due to a hardware failure or by disturbances such as power line problems.

**Recommended Action** Reboot the system and observe whether the problem recurs. Also ensure that the power line has appropriate protection equipment. If the problem is a one-time occurrence, the cause could be a power line disturbance.

**Error Message**

Unexpected exception to CPU vector [dec], PC = [hex]

**Explanation** Either a hardware or a software problem has occurred.

**Recommended Action** Refer to the Recommended Action for the first “Bus Error control register” message in this section.

**Error Message**

Unexpected vectored interrupt (vector offset [dec])

**Explanation** Either a hardware or a software problem has occurred.

**Recommended Action** Refer to the Recommended Action for the first “Bus Error control register” message in this section.

**Error Message**

Unknown (control reg=[hex]) Error, address: [hex] at [hex] (PC)

**Explanation** Either a hardware or a software problem has occurred.

**Recommended Action** Refer to the Recommended Action for the first “Bus Error control register” message in this section.

**Miscellaneous Error Messages**

---

# INDEX

## A

ALIGN-1-FATAL 9  
ALIGN-3-CORRECT 9  
ALIGN-3-FULL 9  
ALIGN-3-NOMEM 10  
ALIGN-3-SPURIOUS 10  
ALIGN-3-UNUSUAL 10  
ARAP-3-BADPAK 11  
ARAP-3-NOMEM 13  
ARAP-4-CONFAILED 12  
ARAP-4-GETBUFFER 12  
ARAP-4-NOEXTTACACS 12  
ARAP-5-INITCONFUSED 12  
ARAP-5-PAKINVALID 13  
ARAP-6-ADDRFREE 11  
ARAP-6-ADDRUSED 11  
ARAP-6-BADEXIT 11  
AT-1-NOMEM 25  
AT-2-ASSERTFAILED 14  
AT-3-CANTDEL 16  
AT-3-DEFZONEERR 18  
AT-3-IFCONFLICT 19  
AT-3-INVNBPCMD 21  
AT-3-MACIPBADCONF 21  
AT-3-MACIPNOCABLE 22  
AT-3-MCMISMATCH 23  
AT-3-NETDISAGREES 23  
AT-3-NOADDRSAVAIL 25  
AT-3-NOBESTPATH 25  
AT-3-NORROUTE 26  
AT-3-NOSRCADDR 26  
AT-3-NOSUCHNBR 27  
AT-3-NOTRUNNING 27  
AT-3-SUBROUTINE\_ERROR 31  
AT-3-ZONEDISAGREES 31  
AT-4-NETINVALID 24  
AT-4-PATHREJECTED 29  
AT-5-ADDRINUSE 14  
AT-5-ADDRINVALID 14  
AT-5-BADNEIGHBOR 15  
AT-5-COMPATERR1 16  
AT-5-COMPATERR2 16  
AT-5-COMPATERR3 17  
AT-5-COMPATERR4 17  
AT-5-DISCOFF 18  
AT-5-DUPADDR 19  
AT-5-FDDICOMPAT 19  
AT-5-INTCLEARED 20  
AT-5-INTDOWN 20  
AT-5-INTRESTART 20  
AT-5-LOSTNEIGHBOR 21  
AT-5-NOSUCHROUTE 27  
AT-5-NOTSUPPORTED 27  
AT-5-OLDMCI 28

AT-5-PATHCHANGE 29  
AT-5-RTMPSTATE 31  
AT-6-ACQUIREMODE 13  
AT-6-ADDRUSED 14  
AT-6-BADROUTE 15  
AT-6-CONFIGOK 17  
AT-6-DELROUTE 18  
AT-6-INTUP 20  
AT-6-MACIPDOWN 21  
AT-6-MACIPUP 22  
AT-6-NBRDELETED 23  
AT-6-NEIGHBORUP 23  
AT-6-NEWNEIGHBOR 24  
AT-6-NEWROUTE 24  
AT-6-NEWZONE 24  
AT-6-NODEWRONG 25  
AT-6-NOPROXY 26  
AT-6-ONLYROUTER 28  
AT-6-OUTOFSYNC 28  
AT-6-PATHADD 28  
AT-6-PATHDEL 29  
AT-6-PATHNOTIFY 29  
AT-6-REGPENDING 30  
AT-6-ROUTEDOWN 30  
AT-6-ROUTENOTIFY 30  
AT-6-ROUTEOK 30  
AT-6-ZONEGC 31  
AT-6-ZONEPROXY 32  
AT-7-BUGREPORT 15  
AT-7-DEBUGMSG 17

## B

BGP-3-NOMEMORY 33  
BGP-3-RADIXINIT 33  
BRI-0-NOMEMORY 34  
BRI-1-INITFAIL 34  
BRI-3-BADENCAP 33  
BRI-3-ODDSTART 34  
BRI-3-OUTENCAP 34  
BRI-3-OWNERR 35

## C

CBUS-3-AIPCFG 35  
CBUS-3-AIPINVPLIM 35  
CBUS-3-AIPRSET 35  
CBUS-3-AIPRSETU 35  
CBUS-3-BIGBUF 35  
CBUS-3-BUFFER 36  
CBUS-3-CBUSBCE 36  
CBUS-3-CBUSBCEPERM 36

CBUS-3-CIPRESET	36	CIP-CCA-0-BADCCA	54
CBUS-3-CORRUPT	37	CIP-CCA-0-BSQ_FULL	54
CBUS-3-CTRACHECK	37	CIP-CCA-0-DEV_ERR1	56
CBUS-3-CTRCMDFAILED	37	CIP-CCA-0-DEV_ERR2	57
CBUS-3-CTRINIT	37	CIP-CCA-0-DEV_ERR3	57
CBUS-3-CTRLRINITERR	38	CIP-CCA-0-WRITE_FAIL	61
CBUS-3-CTRRAMTEST	38	CIP-CCA-3-ACR	54
CBUS-3-CTRRESET	38	CIP-CCA-3-BYPASS	55
CBUS-3-CTRUCHECK	38	CIP-CCA-3-CANCEL1	55
CBUS-3-DAUGHTER	39	CIP-CCA-3-CANCEL2	55
CBUS-3-DAUGHTER_NO_RSP	40	CIP-CCA-3-COMMAND_PATH	56
CBUS-3-FDDIRSET	40	CIP-CCA-3-CONN_RESULT	56
CBUS-3-FDDIRSETU	40	CIP-CCA-3-END_STATUS	57
CBUS-3-FSIPRSET	41	CIP-CCA-3-LOGOUT	58
CBUS-3-GHOST	41	CIP-CCA-3-REQUEST_STATUS	58
CBUS-3-HSSIRSET	41	CIP-CCA-3-RESET_PATH	58
CBUS-3-HSSIRSETU	41	CIP-CCA-3-RLP1	59
CBUS-3-INITERR	42	CIP-CCA-3-RLP2	59
CBUS-3-MEC_OUTHUNG	42	CIP-CCA-3-SCBNRDY	59
CBUS-3-MIPSTAT	42	CIP-CCA-3-SEL_RESET1	60
CBUS-3-NOMEMORY	43	CIP-CCA-3-SEL_RESET2	60
CBUS-3-RESETNXI	44	CIP-CCA-3-STATUS_NOTICE	60
CBUS-3-TESTFAIL	44	CIP-CCA-3-SYS_RESET	61
CBUS-3-TXALLOC	44	CIP-CCA-3-WRAPPLUG	61
CBUS-4-INTR	42	CIP-CLAW-0-BADHAPPL	62
CBUS-4-NOCOOKIE	43	CIP-CLAW-0-BADHNAME	62
CBUS-4-OUTHUNG	43	CIP-CLAW-0-BADRSIZE	62
CIP-ADAPTER-0-DIAGDATA	46	CIP-CLAW-0-BADVERSION	63
CIP-ADAPTER-0-DIAGFAIL	47	CIP-CLAW-0-BADWAPPL	63
CIP-ADAPTER-0-DIAGTERM	48	CIP-CLAW-0-BADWNAME	63
CIP-ADAPTER-0-LOADFAIL	48	CIP-CLAW-0-BADWSIZE	64
CIP-ADAPTER-0-START_FAIL	50	CIP-CLAW-0-NOLINKID	64
CIP-ADAPTER-6-DIAGBEGIN	46	CIP-CLAW-6-BADSVR	63
CIP-ADAPTER-6-DIAGDATA2	46	CIP-CLAW-6-COMMAND	64
CIP-ADAPTER-6-DIAGFAIL2	47	CIP-CLAW-6-NOCONN	64
CIP-ADAPTER-6-DIAGGOOD2	47	CIP-CLAW-6-NOTPRESENT	65
CIP-ADAPTER-6-DIAGRANGE	47	CIP-CLAW-6-NOTXBUF	65
CIP-ADAPTER-6-DIAGSTOP	48	CIP-CLAW-6-RANGE	65
CIP-ADAPTER-6-DIAGTERM2	48	CIP-CLAW-6-TYPE	65
CIP-ADAPTER-6-LOGDATA	49	CIP-CLAW-6-UNEXPECTED	66
CIP-ADAPTER-6-LOGOUT	49	CIP-CONFIG-0-BADSPD	67
CIP-ADAPTER-6-LOGSAME	49	CIP-CONFIG-3-BADVCN	67
CIP-ADAPTER-6-SCAN	49	CIP-CONFIG-3-BADVCN2	67
CIP-ADAPTER-6-SCANDATA	50	CIP-CONFIG-3-CLAWDEV	68
CIP-ADAPTER-6-WRAP	50	CIP-CONFIG-3-DIFFDEVT	68
CIP-ADAPTER-6-WRAPSTOP1	50	CIP-CONFIG-3-DUPDEV	68
CIP-ADAPTER-6-WRAPSTOP2	51	CIP-CONFIG-3-DUPVCN	69
CIP-BSQ-0-SCB_CHAIN	51	CIP-CONFIG-3-NOAPPLESPC	69
CIP-BSQ-0-TOOMANY	51	CIP-CONFIG-3-NOCUI	69
CIP-CBUS_ATTEN-3-BADADDR	52	CIP-CONFIG-3-NODEV	69
CIP-CBUS_WRITE-3-BADTYPE	52	CIP-CONFIG-3-NODEVSPC	70
CIP-CBUS_WRITE-3-INVALID	52	CIP-CONFIG-3-NOFREEPATH	70
CIP-CBUS_WRITE-3-MISSING	53	CIP-CONFIG-3-NOPATHSPC	70
CIP-CBUS_WRITE-3-STACK	53	CIP-CONFIG-3-NOVCN	70
CIP-CBUS_WRITE-3-UNEXPECTED	53	CIP-CONFIG-3-TOOMANYDEV	71



CIP-CONFIG-3-WORKLEFT 71  
 CIP-CONFIG-3-WRONGINT 71  
 CIP-CONFIG-6-BAD\_DBTYPE 66  
 CIP-CONFIG-6-BADCONFIG 66  
 CIP-CONFIG-6-BADDEVT 67  
 CIP-DIAG-6-BADCODE 72  
 CIP-DMA-0-INCOMPL 74  
 CIP-DMA-0-NOXFERR 74  
 CIP-DMA-3-CBUSERR 73  
 CIP-DMA-3-CBUSPARITY 73  
 CIP-DMA-3-LOGICERR 74  
 CIP-DMA-4-DATAPARITY 73  
 CIP-GET\_DATA-0-NOMEMORY 75  
 CIP-INT-0-ADDFAST 75  
 CIP-INT-0-ADDFLIH 75  
 CIP-INT-0-ADDFULL 76  
 CIP-INT-0-ADDTRAP 76  
 CIP-INT-0-REMOVEFAST 76  
 CIP-INT-0-REMOVEFLIH 76  
 CIP-INT-0-REMOVEFULL 76  
 CIP-INT-0-REMOVETRAP 77  
 CIP-LOVE-3-LOVELETTER 77  
 CIP-MEMD-3-BADVCN 77  
 CIP-NEVADA-0-BADADD 78  
 CIP-NEVADA-0-BADDISABLE 78  
 CIP-NEVADA-0-BADENABLE 78  
 CIP-NEVADA-0-BADENABLE2 79  
 CIP-NEVADA-0-BADINT 79  
 CIP-NEVADA-0-BADREMOVE 79  
 CIP-SCB-6-BADSCB 80  
 CIP-SCHED-0-BADPRIORITY 80  
 CIP-SCHED-0-INVLOCK1 80  
 CIP-SCHED-0-INVLOCK2 81  
 CIP-SCHED-0-NMLDATA 82  
 CIP-SCHED-0-NOLOCK 81  
 CIP-SCHED-0-NOPROCID 81  
 CIP-SCHED-0-NOSTACK 81  
 CIP-SCHED-0-NOTCB 82  
 CIP-SCHED-0-NOTMYLOCK 82  
 CIP-SLC-3-SCANEP1 83  
 CIP-SLC-3-SCANEP2 83  
 CIP-SLC-3-SCANSLC 83  
 CIP-SLC-3-STOPBIDITO 83  
 CIP-SLC-3-STOPEPTO 84  
 CLNS-3-NSAPES 85  
 CLNS-4-AREALOST 84  
 CLNS-4-EDATFAIL 84  
 CLNS-4-EESHFAIL 84  
 CLNS-4-NSAPIS 85  
 CLNS-4-REDIRECT 85  
 COMP-3-CONFIGBAD 85  
 COMP-3-SIZEBAD 86  
 COMP-3-SYNCBAD 86  
 COMP-3-VERSIONBAD 86  
 COMP-5-NOBUF 85

CONTROLLER-2-CRASHED 86  
 CONTROLLER-3-REMLOOP 86  
 CONTROLLER-3-UPDOWN 87  
 CSC2-4-BREAK 87

## D

DBUS-3-BADEEPROM 87  
 DBUS-3-CXBUSERR 88  
 DBUS-3-DAUGHTER\_STATS 88  
 DBUS-3-DBUSINTERR 88  
 DBUS-3-NOMAC 88  
 DBUS-3-NOMAGIC 89  
 DBUS-3-SLOTCOMP 89  
 DBUS-3-UNKNOWN 89  
 DBUS-3-WCSCTRLRERR 89  
 DBUS-3-WCSERR 90  
 DBUS-3-WCSLDERR 90  
 DBUS-3-WCSPARERR 91  
 DLSWC-3-BADCLSI 91  
 DLSWC-3-BADCLSICNF 91  
 DLSWC-3-BADCLSIDATALEN 91  
 DLSWC-3-BADCLSIHDRLEN 92  
 DLSWC-3-BADCLSIIDTYPE 92  
 DLSWC-3-BADCLSIIND 92  
 DLSWC-3-BADCLSI PRIMTYPE 92  
 DLSWC-3-BADCLSIRET 93  
 DLSWC-3-BADCLISISAP 93  
 DLSWC-3-BADDL COP 93  
 DLSWC-3-BADPEEROP 93  
 DLSWC-3-BADSSPEVENT 94  
 DLSWC-3-BADSSPHDR 94  
 DLSWC-3-BADSSPOP 94  
 DLSWC-3-BADTIMEROP 94  
 DLSWC-3-FAILASSERT 94  
 DLSWC-3-FORKFAIL 95  
 DLSWC-3-FSM ACTION 95  
 DLSWC-3-FSMCALL 95  
 DLSWC-3-FSMERR 95  
 DLSWC-3-FSMINTERR 95  
 DLSWC-3-FSMUNKERR 96  
 DLSWC-3-INVALIDSTATE 96  
 DLSWC-3-INVALIDDTIMER 96  
 DLSWC-3-NOBUFF 96  
 DLSWC-3-NODLSW 97  
 DLSWC-3-NOMEMBACK 97  
 DLSWC-3-NOMEMDLC 97  
 DLSWC-3-NOMEMSSP 97  
 DLSWC-3-NOPARAM 97  
 DLSWC-3-NOPEER 98  
 DLSWC-3-RECVSSP 98  
 DLSWC-3-SENDSSP 98  
 DLSWP-3-PBADVALUE 98  
 DLSWP-3-PGENERAL 98

DLSWP-3-PNOMEM 99  
 DLSWP-3-PPASSIVE 99  
 DLSWP-3-PPRIMISMATCH 99  
 DNET-3-HEARSELF 99  
 DNET-3-NOMEMORY 100  
 DNET-4-MAPCON 100  
 DSPU-3-ActpuNegResponse 100  
 DSPU-3-CLSIBadAdptCorr 101  
 DSPU-3-CLSIBadIdentifier 101  
 DSPU-3-CLSIBadIdentifierType 101  
 DSPU-3-CLSIBadLength 101  
 DSPU-3-CLSIBadPrimitiveCmd 102  
 DSPU-3-CLSIBadPrimitiveType 102  
 DSPU-3-CLSIBadReturnCode 102  
 DSPU-3-CLSIUnexpctActSapCnf 102  
 DSPU-3-CLSIUnexpctDeactSapCnf 103  
 DSPU-3-CLSIUnexpctEnableCnf 103  
 DSPU-3-CLSIUnexpctIdStnInd 103  
 DSPU-3-LSConnInFailed 103  
 DSPU-3-LSConnInFailedNoMem 104  
 DSPU-3-LSConnInFromHostFailed 104  
 DSPU-3-LSConnInFromPuFailed 104  
 DSPU-3-LSConnOutToHostFailed 104  
 DSPU-3-LSConnOutToPuFailed 105  
 DSPU-3-LSInvalidMaxIFrame 105  
 DSPU-3-LSInvalidWindowSize 105  
 DSPU-3-LSNoACTPUCapability 105  
 DSPU-3-LSXIDNegotiationError 106  
 DSPU-3-NotifyNegRsp 106  
 DSPU-3-SnaBadData 106  
 DSPU-3-UnknownXid 107  
 DUAL-3-BADSUMNOTIFY 107  
 DUAL-3-LINKSEXIST 107  
 DUAL-3-NOHANDLE 108  
 DUAL-3-NOMATCH 108  
 DUAL-3-NOMEMORY 108

## E

EGP-3-NOPDB 108  
 EGP-3-TOOBIG 109  
 ENV-1-SHUTDOWN 109  
 ENV-2-FLOW 109  
 ENV-2-TEMP 110  
 ENV-2-VOLTAGE 110  
 ENVM-1-SHUTDOWN 111  
 ENVM-2-FAN 110  
 ENVM-2-SUPPLY 111  
 ENVM-2-TEMP 111  
 ENVM-2-VOLTAGE 111

## F

FDDI-3-BADMUL 112  
 FDDI-3-BADSLOT 112  
 FDDI-3-FDDIFAIL 112  
 FDDI-3-FDDIFAIL2 112  
 FDDI-3-FDDIRSET 113  
 FDDI-3-FDDIRSETU 113  
 FDDI-3-NOCAM 113  
 FDDISTAT-4-STATUS 113  
 FR-5-DLCICHANGE 114

## G

GRIP-2-BADROUTE 114  
 GRIP-3-BADPATHS 114

## H

HD-0-INITFAIL 115  
 HD-0-NOMEMORY 116  
 HD-1-BADENCAP 115  
 HD-1-BADPORT 115  
 HD-1-BADPORTADAPTER 115  
 HD-1-BADRING 115  
 HD-1-INITFAIL 115  
 HD-1-MEMERR 116  
 HD-3-ODDSTART 116  
 HD-3-OUTENCAP 116  
 HD-3-OWNERR 117  
 HD-5-LINEFLAP 116

## I

IGRP-3-NOSOCKET 117  
 IP-3-BADIPALIGN 117  
 IP-3-BADSROUTE 118  
 IP-3-DESTHOST 118  
 IP-4-CLASS 118  
 IP-4-DUPADDR 118  
 IPRT-2-COMPRESS 118  
 IPRT-3-NOMEMORY 119  
 IPRT-3-TOOMANYNETS 119  
 IPX-3-BADIGRPSAP 119  
 IPX-3-BADIGRPSATYPE 119  
 IPX-3-BADPATHS 120  
 IPX-3-NOMEMORY 120

## L

LANCE-1-INITFAIL 122  
LANCE-1-MEMERR 122  
LANCE-1-NOMEMORY 122  
LANCE-3-BADENCAP 121  
LANCE-3-BADUNIT 121  
LANCE-3-OWNERR 123  
LANCE-3-SPURIDON 123  
LANCE-3-UNDERFLO 123  
LANCE-4-BABBLE 121  
LANCE-5-COLL 121  
LANCE-5-LATECOLL 122  
LANCE-5-LOSTCARR 122  
LANMGR-4-BADRNGNUM 123  
LANMGR-4-BADUPCALL 124  
LANMGR-4-OLDTRAMON 124  
LAPB-2-NOBUF 126  
LAPB-3-NOINPIDB 126  
LAPB-3-NULLPAK 126  
LAPB-4-CTRLBAD 124  
LAPB-4-FRAMEERR 125  
LAPB-4-INFOBAD 125  
LAPB-4-INVNR 125  
LAPB-4-NITOOBIG 126  
LAT-3-BADDATA 127  
LAT-3-BUFFULL 127  
LAT-3-NOSYNC 127  
LAT-3-NULLIDB 127  
LAT-3-QBSPACED 127  
LAT-3-REUSE 127  
LINEPROTO-5-UPDOWN 128  
LINK-2-BADVCALL 129  
LINK-2-LINEST 131  
LINK-2-NOSOURCE 131  
LINK-2-UENCAP 131  
LINK-3-BADENCAP 128  
LINK-3-BADEETHER 128  
LINK-3-BADMACREG 129  
LINK-3-REMLOOP 131  
LINK-3-TOOBIG 131  
LINK-3-UPDOWN 132  
LINK-4-BRIDGECONFLICT 130  
LINK-4-FDDISTAT 130  
LINK-4-FDDIUNK 130  
LINK-5-BOOTP 129  
LINK-5-CHANGED 130  
LINK-5-RARP 131  
LINK-5-SLARP 132

## M

MAILBOX-3-BADDATA 133

MAILBOX-3-FLAGSTAT 133  
MAILBOX-3-INITPC2 133  
MAILBOX-3-INTERR 133  
MAILBOX-3-MAIL020 133  
MAILBOX-3-MAILFAIL 133  
MAILBOX-3-PC2 133  
MAILBOX-3-SPURINT 133  
MCI-3-RXINDEX 135  
MCI-3-SETUPERR 135  
MCI-4-NOCOOKIE 134  
MCI-4-NOKEEPALIVE 134  
MCI-4-RSETFAIL 135  
MCI-4-TESTFAIL 136  
MCI-5-INPUTERR 134  
MCI-5-OBSOLETE 135  
MK5-0-INITFAIL 137  
MK5-0-INITUERR 137  
MK5-0-NOMEMORY 138  
MK5-1-INITNOPPRIM 137  
MK5-1-MEMERR 138  
MK5-3-BADENCAP 137  
MK5-3-BADRING 137  
MK5-3-BADUNIT 115, 137  
MK5-3-ODDSTART 138  
MK5-3-OUTENCAP 138  
MK5-3-OWNERR 138  
MK5-3-PLOSTERR 139  
MK5-3-PPRIMERR 139  
MK5-3-SPURPPRIMERR 139  
MK5-3-UPRIMERR 139  
MK5-5-LINEFLAP 137

## N

NIM-2-BADSLLOT 139  
NIM-2-BADSUBUNIT 139  
NIM-2-DEADCHAINQ 139  
NIM-2-LOSTCHAINQ 139  
NIM-2-NOHWADDRESS 139

## O

OIR-6-INSCARD 140  
OIR-6-REMCARD 140  
OSPF-3-INTERNALERR 142  
OSPF-3-NOBACKBONE 142  
OSPF-3-NOCONNDB 142  
OSPF-3-NOLSA 143  
OSPF-3-NOMEMORY 143  
OSPF-3-UNKNOWNSTATE 145  
OSPF-4-BADLENGTH 141  
OSPF-4-BADLSATYPE 141

OSPF-4-CONFLICTING\_LSAID 141  
OSPF-4-ERRRCV 142  
OSPF-4-NONEIGHBOR 143  
OSPF-4-NORTRID 143  
OSPF-4-NOTREDIST4 144  
OSPF-4-NOTREDIST5 145  
OSPF-6-NOSRCPDB 144  
OSPF-6-NOTREDIST1 144  
OSPF-6-NOTREDIST3 144

## P

PAD-2-INTR 145  
PAD-2-PUTSETUP 145  
PAD-3-GETLINE 145  
PARSER-3-BADSUBCMD 146  
PARSER-3-CREATEINT 146  
PARSER-3-NOLINK 146  
PARSER-3-NOMEMORY 147  
PARSER-4-INVLDLINE 146  
PARSER-4-LINKPOINT 146  
PARSER-4-MULFUNCS 146  
PARSER-4-MULTIPLEIFS 146  
PARSER-4-NUMHELP 146  
PARSER-4-NVGEN 146  
PARSER-4-PROTOADDR 146  
PPP-4-CONFNAK 147  
PPP-4-IPXNET 147  
PPP-4-NOEXTTACACS 148  
PPP-6-LOOPED 148

## Q

QLLC-3-BADOPCODE 148  
QLLC-3-BADQLLCSTATE 148  
QLLC-3-BADRSRBOPCODE 149  
QLLC-3-BADSTATE 149  
QLLC-3-BADSTATEEVENT 149  
QLLC-3-DIFFPRTR 149  
QLLC-3-GENERRMSG 150  
QLLC-3-IFRAME 150  
QLLC-3-LNXNOTFOUND 150  
QLLC-3-NOLLC2 150  
QLLC-3-NOMACADDR 151  
QLLC-3-NOMEM 151  
QLLC-3-NONULLXID 151  
QLLC-3-NOPAKENQ 151  
QLLC-3-NOXID2 152  
QLLC-3-NULLPTR 152  
QLLC-4-NOQLLC 152

## R

RCMD-4-INVALIDHOST 152  
RCMD-4-NOMEMORY 153  
RCMD-4-NORSHPROC 153  
RCMD-4-RCMDDNSFAIL 153  
RCMD-4-RCPATTEMPTED 153  
RCMD-4-RSHATTEMPTED 153  
RCMD-4-RSHPORTATTEMPT 154  
REGEXP-2-BADLIST 154  
REMIF-3-BADCMD 154  
REMIF-3-CLOSED 155  
REMIF-3-DUOPEN 155  
REMIF-3-IFNONE 155  
REMIF-3-IQUEUE 155  
REMIF-3-NOMEM 155  
REMIF-3-OPEN 156  
REMIF-3-OQUEUE 156  
REMIF-3-TCPERR 156  
RIP-3-NOSOCKET 156  
RSRB-3-BADVERSIONFST 157  
RSRB-3-BADVERSIONIF 157  
RSRB-3-BADVERSIONTCP 157  
RSRB-3-FSTERR 158  
RSRB-3-HDRNOVRP 158  
RSRB-3-HDRVRP 158  
RSRB-3-IFERR 159  
RSRB-3-NOMEMORY 159  
RSRB-3-NOTREM 160  
RSRB-3-SENDPUNTFST 160  
RSRB-3-SENDPUNTIF 160  
RSRB-4-BADLEN 157  
RSRB-4-BADLENIP 157  
RSRB-4-BADVRE 158  
RSRB-4-CONIPST 158  
RSRB-4-CONNILLSTATE 158  
RSRB-4-CONNSTAT 158  
RSRB-4-HDRRECV 158  
RSRB-4-ILLPEER 159  
RSRB-4-LOCAL 159  
RSRB-4-OPTNULL 160  
RSRB-4-PEERSTAT 160

## S

SDLC-2-ILLEGSTATE 161  
SDLC-2-NOBUF 162  
SDLC-2-NOPOINTER 163  
SDLC-3-NOINPIDB 162  
SDLC-3-NULLPAK 163  
SDLC-4-CTRLBAD 160  
SDLC-4-DROPPED 161  
SDLC-4-FRAMEERR 161

SDLC-4-INFOBAD 161  
SDLC-4-INVNR 161  
SDLC-4-NITOOBIG 162  
SDLC-4-NOFRMRSPACE 162  
SDLC-4-SDLC\_ERR 163  
SDLC-4-UNKNOWNADDR 163  
SDLC-4-WRONGADDR 164  
SDLLC-5-ACT\_LINK 164  
SDLLC-5-DACT\_LINK 164  
SEC-2-NOOPT 165  
SEC-2-NOTSEC 165  
SEC-2-SECINS 165  
SEC-3-NOMAX 165  
SEC-4-TOOMANY 165  
SLIP-2-BADQUOTE 166  
SLIP-2-BADSTATE 166  
SNMP-3-SOCKET 167  
SNMP-4-NOTRAPIP 166  
SSE-2-HUNG 167  
SSE-2-HWFAILURE 168  
SSE-2-MEMERROR 168  
SSE-2-NOTZERO 168  
SSE-2-SWFAILURE 169  
SSE-3-BADMEMORY 167  
SSE-3-NOMEMORY 168  
STANDBY-3-BADAUTH 170  
STANDBY-3-NOBUFFER 170  
STANDBY-3-NOMEMORY 170  
STANDBY-3-NOSOCKET 171  
STUN-2-NOBUF 172  
STUN-2-NOTGI 173  
STUN-3-BADCONN 171  
STUN-3-BADLENOP 171  
STUN-3-BADMAGIC 171  
STUN-3-BADMAGICTCP 171  
STUN-3-BADPASSIVEOPEN 171  
STUN-3-CONNILLSTATE 171  
STUN-3-NOPROTMEM 172  
STUN-3-NOTGEM 173  
STUN-3-SENDPUNT 174  
STUN-3-SENDPUNTTCP 174  
STUN-4-PEERSTATE 174  
STUN-6-CONNOPENFAIL 172  
STUN-6-ERR 172  
STUN-6-OPENED 173  
STUN-6-OPENING 173  
STUN-6-PASSIVEOPEN 173  
STUN-6-PEERSHUTDOWN 174  
STUN-6-RECONNECT 174  
STUN-6-TCPFINI 175  
STUN-6-TCPPEERSHUT 175  
SUBSYS-2-BADCLASS 175  
SUBSYS-2-BADVERSION 176  
SUBSYS-2-MISMATCH 176  
SUBSYS-2-NOTFOUND 176  
SYS-1-NOECO 184  
SYS-1-OVERTEMP 186  
SYS-2-ALREADYFREE 177  
SYS-2-BADLIST 178  
SYS-2-BADPID 179  
SYS-2-BADPOOL 179  
SYS-2-BADPOOLMAGIC 179  
SYS-2-BADSHARE 179  
SYS-2-BADSTACK 179  
SYS-2-BLOCKHUMG 179  
SYS-2-CFORKLEV 179  
SYS-2-CHUNKBOUNDS 180  
SYS-2-DUPEXPORT 181  
SYS-2-FREEBAD 182  
SYS-2-FREEFREE 182  
SYS-2-GETBUF 182  
SYS-2-HEADER 182  
SYS-2-INLIST 182  
SYS-2-INLIST1 182  
SYS-2-INPUTQ 182  
SYS-2-INSCHED 182  
SYS-2-INTSCHED 182  
SYS-2-LINKED 183  
SYS-2-LOWMEM 183  
SYS-2-NOBLOCK 184  
SYS-2-NOMEMFRG 185  
SYS-2-NOMEMORY 185  
SYS-2-NOPROCESS 185  
SYS-2-NOTDEAD 185  
SYS-2-NOTQ 185  
SYS-2-PAKCLIP 187  
SYS-2-QCOUNT 187  
SYS-2-QINSERT 187  
SYS-2-RETBUF 189  
SYS-2-RETBUF1 189  
SYS-2-SELF 189  
SYS-2-SELFLINKED 189  
SYS-2-SHARED 189  
SYS-2-SHARED1 189  
SYS-2-SMASHEDINFO 189  
SYS-2-SPEC 189  
SYS-2-SUPNOT 190  
SYS-2-WRONGPOOL 191  
SYS-3-BADBLOCK 177  
SYS-3-BADDISP 177  
SYS-3-BADFREEPTRS 177  
SYS-3-BADLINKTYPE 177  
SYS-3-BADMAGIC 178  
SYS-3-BADPARAM 178  
SYS-3-BADRESID 179  
SYS-3-CONFIG\_NV\_ERR 180  
SYS-3-CPUHOG 181  
SYS-3-HARIKARI 182  
SYS-3-INUSEFREE 182  
SYS-3-INVMEMINT 183

SYS-3-MSGLOST 183  
 SYS-3-NOPROC 185  
 SYS-3-NULLIDB 185  
 SYS-3-NZREFCNT 186  
 SYS-3-OVERRUN 186  
 SYS-3-REGARG 187  
 SYS-3-REGCREA2 187  
 SYS-3-REGDFLT 188  
 SYS-3-REGNONE 188  
 SYS-3-REGTYPE 188  
 SYS-3-SOCKUNKN 189  
 SYS-3-SUPNONE 189  
 SYS-3-TTYMEM 190  
 SYS-3-WRONGFREELIST 190  
 SYS-4-DUAL\_MESSAGE 181  
 SYS-4-REGEXP 187  
 SYS-4-RELOAD\_ATTEMPT 189  
 SYS-5-CONFIG 179, 180  
 SYS-5-CONFIG\_I 180  
 SYS-5-CONFIG\_L 180  
 SYS-5-CONFIG\_M 180  
 SYS-5-CONFIG\_NV 180  
 SYS-5-CONFIG\_NV\_M 180  
 SYS-5-OUTSETUP 186  
 SYS-5-RELOAD 188  
 SYS-5-RESTART 188  
 SYS-5-TABLEERR 190  
 SYS-6-BLKINFO 179  
 SYS-6-MTRACE 184  
 SYS-6-NOBRIDGE 184  
 SYS-6-STACKLOW 189

## T

TAC-4-UNEXREP 192  
 TAC-6-SENDTMO 192  
 TCP-2-BUFFER 193  
 TCP-2-PUTBYTE 193  
 TMQ-3-NOTFOUND 193  
 TN-2-BADLOGIN 194  
 TN-3-BADSTATE 194  
 TN-3-READLINE 194  
 TR-3-ASYNCUSE 194  
 TR-3-BADBRDGPparms 195  
 TR-3-BADBUFFSIZE 195  
 TR-3-BADFIRM 195  
 TR-3-BADFIRMTYPE 195  
 TR-3-BADFUNC 195  
 TR-3-BADHEADER 195  
 TR-3-BADMUL 195  
 TR-3-BADRNGNUM 196  
 TR-3-BADSLLOT 196  
 TR-3-BADSTART 196  
 TR-3-BADUNIT 196

TR-3-BOGUSDATA 197  
 TR-3-BOGUSLENGTH 197  
 TR-3-COMPFAIL 198  
 TR-3-FILTFail 198  
 TR-3-GETCONF 198  
 TR-3-INCOM 198  
 TR-3-INITFAIL 198  
 TR-3-MADGETX 199  
 TR-3-MODEFAIL 199  
 TR-3-MODFAIL 199  
 TR-3-NOFIRM 199  
 TR-3-NOMEMORY 199  
 TR-3-NOPAK 200  
 TR-3-OLDTRIF 200  
 TR-3-OPENFAIL 201  
 TR-3-OPENFAIL2 201  
 TR-3-PANIC 201  
 TR-3-PANICINF 202  
 TR-3-PANICTYPE 202  
 TR-3-RESETFAIL 202  
 TR-3-RESETFAIL2 202  
 TR-3-RIFBADMAGIC 203  
 TR-3-RIFTBLTRASH 203  
 TR-3-SETBRIDGEFAIL 203  
 TR-3-SETFAIL 203  
 TR-3-SETFUNFAIL 204  
 TR-3-SETGRPFail 204  
 TR-3-SETOPTFAIL 204  
 TR-3-SMTSTATFAIL 204  
 TR-3-STARTFAILED 204  
 TR-3-STARTFAILED2 205  
 TR-3-STATFAIL 205  
 TR-3-TRACMD 207  
 TR-3-UNKNOWN2M 207  
 TR-3-WIREFAULT 207  
 TR-4-BADADAPT 194  
 TR-4-BKGND 197  
 TR-4-BKGNDINT 197  
 TR-4-INTFAIL 198  
 TR-4-NOMOREPAGES 200  
 TR-4-SNKBRIDG 204  
 TR-4-UNKNOWNCOMP 207  
 TR-6-STATE 205  
 TR-6-STATRING 206  
 TUN-4-BADOUTMODE 207  
 TUN-4-RECURDOWN 208  
 TUN-4-RECURSHUT 208

## U

UCODE-3-BADCHKSUM 209  
 UCODE-3-HDRCORRUPT 209  
 UCODE-3-LDFAIL 209  
 UCODE-3-NOFILE 210

UCODE-3-OLDHARD 210  
UCODE-3-RDFAIL 210  
UCODE-3-TOOBIG 211  
UCODE-3-WRONGHARD 211  
UTIL-2-RANGEDUP 212  
UTIL-2-RANGERET 211  
UTIL-3-RANGEINVERT 212

XNS-2-BADROUTE 222  
XNS-3-BADPATHS 222

## V

VINES-2-BADPARAM 212  
VINES-2-CACHEFAILED 212  
VINES-2-CACHEUNSUPP 213  
VINES-2-CONSISTENCY 213  
VINES-2-CORRUPTENTRY 213  
VINES-2-DUPADDR 213  
VINES-2-ENCAPFAILED 214  
VINES-2-INVALIDPATH 214  
VINES-2-INVALIDROUTE 215  
VINES-2-NEIGHBOR 215  
VINES-2-NOBUFFERS 215  
VINES-2-NOMEMORY 216  
VINES-2-NOVENCAP 216  
VINES-6-FNNOTFOUND 214  
VINES-6-IPCNOROUTINE 215  
VINES-6-RPCNOSERVICE 216  
VINES-6-RTNNOTFOUND 216

## X

X25-2-ILLP4 218  
X25-3-BADCONFIG 217  
X25-3-INTIMEQ 218  
X25-3-LCIBOGUS 219  
X25-3-NOLCI 218  
X25-3-NOTFINDBH 218  
X25-3-NOTFINDI 218  
X25-3-NOTFINDS 218  
X25-3-PVCBAD 220  
X25-3-PVCDELETE 220  
X25-3-SIZEBAD 221  
X25-3-SPURD1 218  
X25-3-SYNCBAD 221  
X25-3-VCLOSTSYNC 221  
X25-3-VERSIONBAD 222  
X25-4-BADUPCALL 218  
X25-4-DEBUG\_LCI 218  
X25-4-LARGEPKSIZE 218  
X25-4-PARTIALMAP 219  
X25-4-RANGEUNUSED 220  
X25-5-NOBUF 219  
X25-5-NOMEM 219