

Cisco IOS System Error Messages Volume 2 of 2

Release 12.2

Corporate Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
<http://www.cisco.com>
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 526-4100

Customer Order Number: DOC-7813362=
Text Part Number: 78-13362-01

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

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.

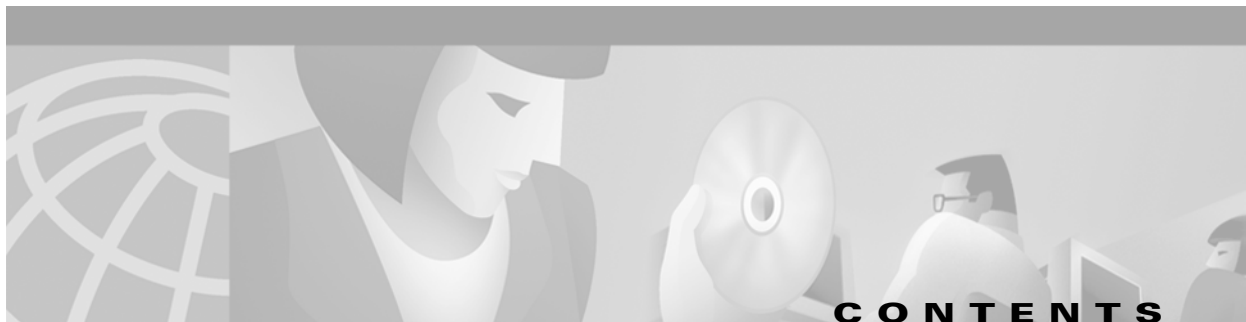
NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO 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 CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

AccessPath, AtmDirector, Browse with Me, CCIP, CCSI, CD-PAC, *CiscoLink*, the Cisco *Powered* Network logo, Cisco Systems Networking Academy, the Cisco Systems Networking Academy logo, Fast Step, Follow Me Browsing, FormShare, FrameShare, GigaStack, IGX, Internet Quotient, IP/VC, iQ Breakthrough, iQ Expertise, iQ FastTrack, the iQ Logo, iQ Net Readiness Scorecard, MGX, the Networkers logo, *Packet*, RateMUX, ScriptBuilder, ScriptShare, SlideCast, SMARTnet, TransPath, Unity, Voice LAN, Wavelength Router, and WebViewer are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn, Discover All That's Possible, and Empowering the Internet Generation, are service marks of Cisco Systems, Inc.; and Aironet, ASIST, BPX, Catalyst, CCDA, CCDP, CCIE, CCNA, CCNP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, the Cisco IOS logo, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Enterprise/Solver, EtherChannel, EtherSwitch, FastHub, FastSwitch, IOS, IP/TV, LightStream, MICA, Network Registrar, PIX, Post-Routing, Pre-Routing, Registrar, StrataView Plus, Stratm, SwitchProbe, TeleRouter, and VCO are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and certain other countries.

All other trademarks mentioned in this document or Web site are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0108R)

Cisco IOS System Error Messages, Volume 2 of 2
Copyright © 2001, Cisco Systems, Inc.
All rights reserved.



About Cisco IOS Software Documentation xi

- Documentation Objectives xi
- Audience xi
- Documentation Organization xi
- New and Changed Information xv
- Document Conventions xv
- Obtaining Documentation xvi
- Obtaining Technical Assistance xvii

System Error Messages Overview SEM2-1

- How This Manual Is Organized SEM2-2
- How to Read System Error Messages SEM2-2
- Error Message Traceback Reports SEM2-18

System Error Messages SEM2-19

- NSP_APS Messages SEM2-19
- NSPINT Messages SEM2-19
- NSP_OIR Messages SEM2-20
- OIR Messages SEM2-23
- OOBP Messages SEM2-24
- OSPF Messages SEM2-25
- PA Messages SEM2-31
- PAD Messages SEM2-37
- PAMMBOX Messages SEM2-37
- PARSER Messages SEM2-40
- PERUSER Messages SEM2-43
- PF Messages SEM2-44
- PGM Messages SEM2-45
- PGMHOST Messages SEM2-47
- PIM Messages SEM2-47
- PLATFORM Messages SEM2-48
- PM Messages SEM2-50
- PM_MODEM_HIST Messages SEM2-53

PM_MODEM_MAINT Messages **SEM2-55**

PNNI Messages **SEM2-57**

PORT Messages **SEM2-60**

POSDW Messages **SEM2-60**

POSLC Messages **SEM2-63**

POT1E1 Messages **SEM2-66**

POTS Messages **SEM2-71**

PPP Messages **SEM2-73**

PQII Messages **SEM2-75**

PQUICC Messages **SEM2-78**

PQUICC_ASYNC Messages **SEM2-82**

PQUICC_ASYNC_NOMEM Messages **SEM2-83**

PQUICC_ETHER Messages **SEM2-83**

PQUICC_ETHERNET Messages **SEM2-85**

PQUICC_FE Messages **SEM2-85**

PQUICC_SERIAL Messages **SEM2-88**

PS Messages **SEM2-89**

PV Messages **SEM2-91**

PW_WATCHER Messages **SEM2-92**

PXF Messages **SEM2-92**

QA Messages **SEM2-95**

QEM Messages **SEM2-95**

QLLC Messages **SEM2-96**

QM Messages **SEM2-100**

QUICC Messages **SEM2-106**

QUICC_ASYNC Messages **SEM2-109**

QUICC_ETHER Messages **SEM2-109**

QUICC_SERIAL Messages **SEM2-111**

RAC Messages **SEM2-112**

RADIO Messages **SEM2-113**

RADIO_DRIVER Messages **SEM2-122**

RADIUS Messages **SEM2-123**

RADIX Messages **SEM2-126**

RAIKO Messages **SEM2-127**

RCMD Messages **SEM2-129**

| | |
|---------------------------------------|-----------------|
| Regen Messages | SEM2-130 |
| Regen_MAINBOARD_ASYNC_PQUICC Messages | SEM2-133 |
| REGISTRY Messages | SEM2-133 |
| RESOURCE_MON Messages | SEM2-134 |
| RESYNCH Messages | SEM2-135 |
| RIP Messages | SEM2-136 |
| RLM Messages | SEM2-137 |
| RM Messages | SEM2-137 |
| ROUTEMAP_IPC Messages | SEM2-139 |
| RPA Messages | SEM2-140 |
| RPC Messages | SEM2-141 |
| RPM Messages | SEM2-143 |
| RP_MLP Messages | SEM2-144 |
| RPM_VIRTUAL_PORT Messages | SEM2-144 |
| RPS Messages | SEM2-146 |
| RSP Messages | SEM2-149 |
| RSRB Messages | SEM2-158 |
| RS_TDM Messages | SEM2-162 |
| RTT Messages | SEM2-164 |
| RUDP Messages | SEM2-165 |
| S4T68360 Messages | SEM2-166 |
| SARMGR Messages | SEM2-168 |
| SCCP Messages | SEM2-169 |
| SCHED Messages | SEM2-170 |
| SCP Messages | SEM2-177 |
| SDLC Messages | SEM2-179 |
| SDLLC Messages | SEM2-185 |
| SEC Messages | SEM2-185 |
| SERVICE_MODULE Messages | SEM2-187 |
| SGBP Messages | SEM2-192 |
| SGCP Messages | SEM2-201 |
| SGCP_APP Messages | SEM2-202 |
| SHELF Messages | SEM2-203 |
| SIGSM Messages | SEM2-204 |
| SLB Messages | SEM2-205 |

SLB_DFP Messages **SEM2-205**

SLIP Messages **SEM2-208**

SLOTDUMP Messages **SEM2-209**

SM Messages **SEM2-209**

SMF Messages **SEM2-210**

SMRP Messages **SEM2-211**

SNAPSHOT Messages **SEM2-212**

SNASW Messages **SEM2-213**

SNMP Messages **SEM2-319**

SNMP_MGR Messages **SEM2-321**

SOI Messages **SEM2-325**

SONET Messages **SEM2-326**

SONETMIB Messages **SEM2-328**

SONICT Messages **SEM2-329**

SPAN Messages **SEM2-330**

SPANTREE Messages **SEM2-332**

SPANTREE_FAST Messages **SEM2-334**

SPARC Messages **SEM2-335**

SPE Messages **SEM2-335**

SRCP_APP Messages **SEM2-339**

SRP Messages **SEM2-339**

SSE Messages **SEM2-340**

SSH Messages **SEM2-343**

SSRP Messages **SEM2-343**

STANDBY Messages **SEM2-344**

STUN Messages **SEM2-345**

SUBSYS Messages **SEM2-349**

SW56 Messages **SEM2-351**

SWITCH Messages **SEM2-351**

SW_VLAN Messages **SEM2-352**

SYS Messages **SEM2-355**

SYSCTLR Messages **SEM2-382**

SYSLOG_SERVER Messages **SEM2-385**

SYSMGT_RPC Messages **SEM2-388**

T1E1SUNI Messages **SEM2-389**

| | |
|------------------------------------|-----------------|
| TAC Messages | SEM2-389 |
| TAGCON Messages | SEM2-390 |
| TAGCOS Messages | SEM2-395 |
| TBRIDGE Messages | SEM2-396 |
| TCATM Messages | SEM2-398 |
| TCP Messages | SEM2-401 |
| TDM Messages | SEM2-405 |
| TDM_CLOCK_SYNCHRONIZATION Messages | SEM2-406 |
| TDP Messages | SEM2-406 |
| TESTPA Messages | SEM2-412 |
| TFIB Messages | SEM2-413 |
| TI1570 Messages | SEM2-416 |
| TIB Messages | SEM2-422 |
| TIGER Messages | SEM2-424 |
| TLV Messages | SEM2-428 |
| TMQ Messages | SEM2-428 |
| TN Messages | SEM2-429 |
| TN3270 Messages | SEM2-429 |
| TR Messages | SEM2-430 |
| TRUNK Messages | SEM2-436 |
| TRUNK_CLOCK Messages | SEM2-439 |
| TRUNK_DFC Messages | SEM2-440 |
| TSP Messages | SEM2-442 |
| TTY Messages | SEM2-443 |
| TTYDRIVER Messages | SEM2-444 |
| TUN Messages | SEM2-446 |
| TXCONN Messages | SEM2-446 |
| UBR7200 Messages | SEM2-449 |
| UCODE Messages | SEM2-464 |
| UDLD Messages | SEM2-467 |
| UNIX Messages | SEM2-469 |
| UTIL Messages | SEM2-469 |
| VFC Messages | SEM2-470 |
| VINES Messages | SEM2-473 |
| VIP Messages | SEM2-477 |

VIPMLP Messages **SEM2-478**
 VOICE_FSM Messages **SEM2-479**
 VOICE_RC Messages **SEM2-479**
 VOIPAAA Messages **SEM2-480**
 VPA Messages **SEM2-480**
 VPD Messages **SEM2-483**
 VPDN Messages **SEM2-485**
 VSI_M Messages **SEM2-488**
 VTSP Messages **SEM2-489**
 WCCP Messages **SEM2-492**
 X25 Messages **SEM2-492**
 XCCTSP_VOICE Messages **SEM2-501**
 XCPA Messages **SEM2-503**
 XTAGATM Messages **SEM2-511**

CMCC System Error Messages SEM2-515

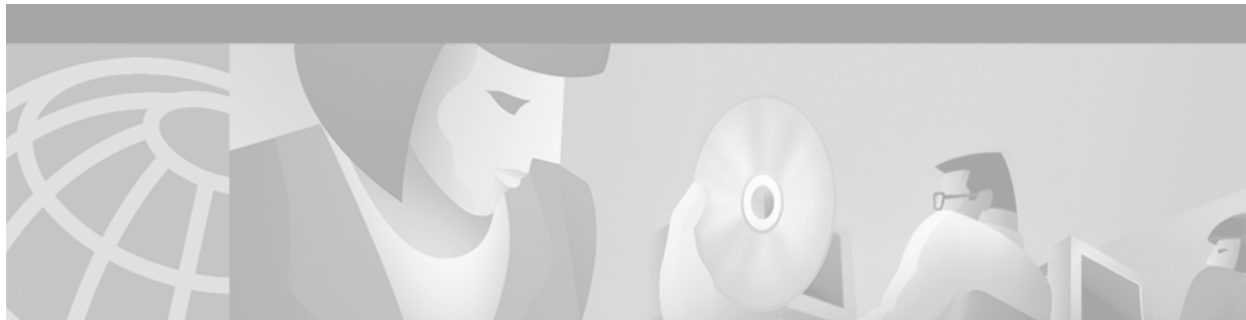
CMCC ADAPTER Messages **SEM2-523**
 CMCC BSQ Messages **SEM2-529**
 CMCC CBUS_ATTEN Messages **SEM2-530**
 CMCC CBUS_WRITE Messages **SEM2-530**
 CMCC CCA Messages **SEM2-532**
 CMCC CIOS Messages **SEM2-538**
 CMCC CIP and CIP2 Messages **SEM2-540**
 CMCC CLAW Messages **SEM2-541**
 CMCC CMPCTG Messages **SEM2-548**
 CMCC CONFIG Messages **SEM2-551**
 CMCC CTA Messages **SEM2-557**
 CMCC DEBUGGER Messages **SEM2-563**
 CMCC DIAG Messages **SEM2-579**
 CMCC DMA Messages **SEM2-579**
 CMCC ECPA and ECPA4 Messages **SEM2-582**
 CMCC GET_DATA Messages **SEM2-582**
 CMCC GT64011 Messages **SEM2-582**
 CMCC INT Messages **SEM2-583**
 CMCC IPC Messages **SEM2-585**
 CMCC IPC_DRVR Messages **SEM2-588**

| | |
|----------------------------|-----------------|
| CMCC IPP Messages | SEM2-589 |
| CMCC LOADER Messages | SEM2-589 |
| CMCC LOVE Messages | SEM2-606 |
| CMCC MBUF Messages | SEM2-606 |
| CMCC MEMD Messages | SEM2-607 |
| CMCC MPC Messages | SEM2-609 |
| CMCC MSG802 Messages | SEM2-620 |
| CMCC NEVADA Messages | SEM2-627 |
| CMCC OFFL Messages | SEM2-629 |
| CMCC PACK Messages | SEM2-640 |
| CMCC PCPA Messages | SEM2-644 |
| CMCC PKTS Messages | SEM2-645 |
| CMCC SCB Messages | SEM2-646 |
| CMCC SCHED Messages | SEM2-647 |
| CMCC SLC Messages | SEM2-650 |
| CMCC SLCI Messages | SEM2-651 |
| CMCC SSI802 Messages | SEM2-653 |
| CMCC SUBSYS Messages | SEM2-653 |
| CMCC SYS Messages | SEM2-655 |
| CMCC SYSMGT_EVENT Messages | SEM2-659 |
| CMCC SYSMGT_RPC Messages | SEM2-660 |
| CMCC TCPIP Messages | SEM2-661 |
| CMCC TN3270S Messages | SEM2-661 |
| CMCC UTIL Messages | SEM2-677 |
| CMCC XCPA Messages | SEM2-677 |

System Failure Messages SEM2-679

Glossary of Acronyms

Index



About Cisco IOS Software Documentation

This chapter discusses the objectives, audience, organization, and conventions of Cisco IOS software documentation. It also provides sources for obtaining documentation from Cisco Systems.

Documentation Objectives

Cisco IOS software documentation describes the tasks and commands necessary to configure and maintain Cisco networking devices.

Audience

The Cisco IOS software documentation set is intended primarily for users who configure and maintain Cisco networking devices (such as routers and switches) but who may not be familiar with the tasks, the relationship between tasks, or the Cisco IOS software commands necessary to perform particular tasks. The Cisco IOS software documentation set is also intended for those users experienced with Cisco IOS software who need to know about new features, new configuration options, and new software characteristics in the current Cisco IOS software release.

Documentation Organization

The Cisco IOS software documentation set consists of documentation modules and master indexes. In addition to the main documentation set, there are supporting documents and resources.

Documentation Modules

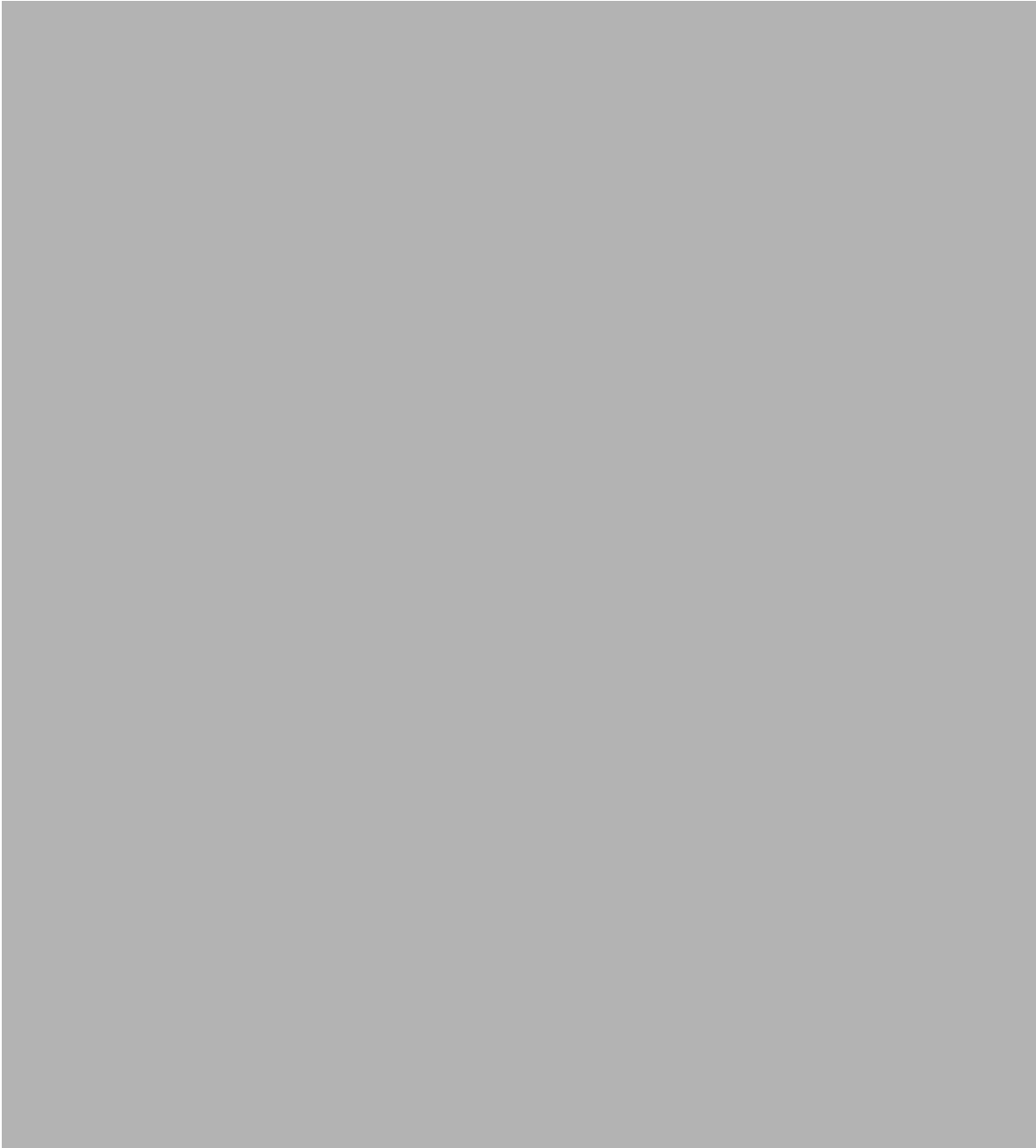
The Cisco IOS documentation modules consist of configuration guides and corresponding command reference publications. Chapters in a configuration guide describe protocols, configuration tasks, and Cisco IOS software functionality and contain comprehensive configuration examples. Chapters in a command reference publication provide complete Cisco IOS command syntax information. Use each configuration guide in conjunction with its corresponding command reference publication.

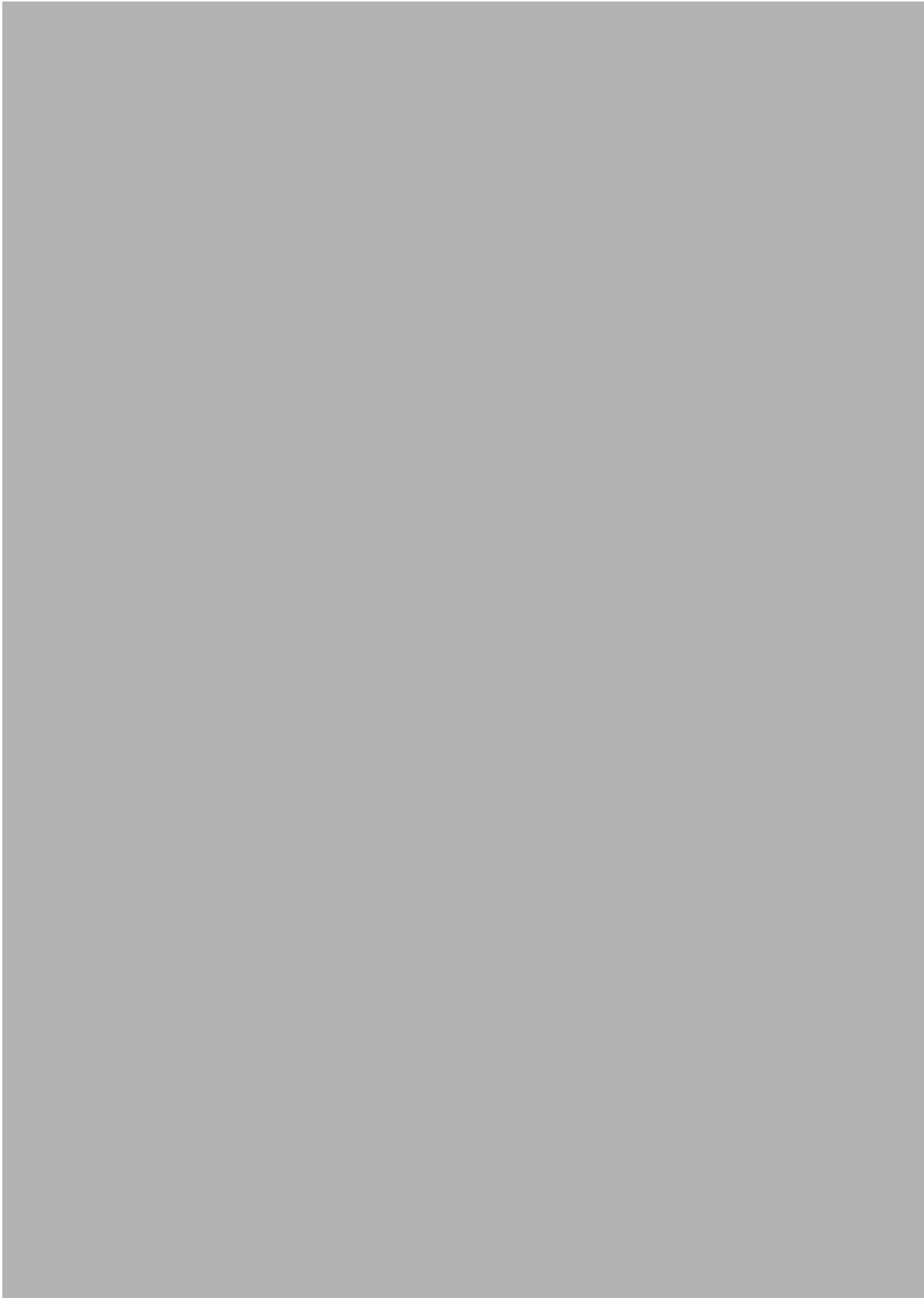
Figure 1 shows the Cisco IOS software documentation modules.

**Note**

The abbreviations (for example, FC and FR) next to the book icons are page designators, which are defined in a key in the index of each document to help you with navigation. The bullets under each module list the major technology areas discussed in the corresponding books.

Figure 1 *Cisco IOS Software Documentation Modules*





Master Indexes

Two master indexes provide indexing information for the Cisco IOS software documentation set: an index for the configuration guides and an index for the command references. Individual books also contain book-specific indexes.

The master indexes provide a quick way for you to find a command when you know the command name but not which module contains the command. When you use the online master indexes, you can click the page number for an index entry and go to that page in the online document.

Supporting Documents and Resources

The following documents and resources support the Cisco IOS software documentation set:

- *Cisco IOS Command Summary* (three volumes)—This publication explains the function and syntax of the Cisco IOS software commands. For more information about defaults and usage guidelines, refer to the Cisco IOS command reference publications.
- *Cisco IOS System Error Messages* (two volumes)—This publication lists and describes Cisco IOS system error messages. Not all system error messages indicate problems with your system. Some are purely informational, and others may help diagnose problems with communications lines, internal hardware, or the system software.
- *Cisco IOS Debug Command Reference*—This publication contains an alphabetical listing of the **debug** commands and their descriptions. Documentation for each command includes a brief description of its use, command syntax, usage guidelines, and sample output.
- *Dictionary of Internetworking Terms and Acronyms*—This Cisco publication compiles and defines the terms and acronyms used in the internetworking industry.
- New feature documentation—The Cisco IOS software documentation set documents the mainline release of Cisco IOS software (for example, Cisco IOS Release 12.2). New software features are introduced in early deployment releases (for example, the Cisco IOS “T” release train for 12.2, 12.2(x)T). Documentation for these new features can be found in standalone documents called “feature modules.” Feature module documentation describes new Cisco IOS software and hardware networking functionality and is available on Cisco.com and the Documentation CD-ROM.
- Release notes—This documentation describes system requirements, provides information about new and changed features, and includes other useful information about specific software releases. See the section “Using Software Release Notes” in the chapter “Using Cisco IOS Software” for more information.
- Caveats documentation—This documentation provides information about Cisco IOS software defects in specific software releases.
- RFCs—RFCs are standards documents maintained by the Internet Engineering Task Force (IETF). Cisco IOS software documentation references supported RFCs when applicable. The full text of referenced RFCs may be obtained on the World Wide Web at <http://www.rfc-editor.org/>.
- MIBs—MIBs are used for network monitoring. For lists of supported MIBs by platform and release, and to download MIB files, see the Cisco MIB website on Cisco.com at <http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml>.

New and Changed Information

The following information is new or changed since the last release of the *Cisco IOS System Error Messages*:

- The *Cisco IOS System Error Messages* has been divided into two separate documents with the following titles:
 - *Cisco IOS System Error Messages, Volume 1 of 2*
 - *Cisco IOS System Error Messages, Volume 2 of 2*
- A new part titled “Glossary of Acronyms” has been added to both volumes of *Cisco IOS System Error Messages*. This part contains expansions for all acronyms and initialisms included in the documentation. Acronyms and initialisms are not spelled out in the messages unless an expansion is considered necessary for clarity.

Document Conventions

Within Cisco IOS software documentation, the term *router* is generally used to refer to a variety of Cisco products (for example, routers, access servers, and switches). Routers, access servers, and other networking devices that support Cisco IOS software are shown interchangeably within examples. These products are used only for illustrative purposes; that is, an example that shows one product does not necessarily indicate that other products are not supported.

The Cisco IOS documentation set uses the following conventions:

| Convention | Description |
|---------------|--|
| ^ or Ctrl | The ^ and Ctrl symbols represent the Control key. For example, the key combination ^D or Ctrl-D means hold down the Control key while you press the D key. Keys are indicated in capital letters but are not case sensitive. |
| <i>string</i> | A string is a nonquoted set of characters shown in italics. For example, when setting an SNMP community string to public, do not use quotation marks around the string or the string will include the quotation marks. |

Command syntax descriptions use the following conventions:

| Convention | Description |
|-----------------|---|
| boldface | Boldface text indicates commands and keywords that you enter literally as shown. |
| <i>italics</i> | Italic text indicates arguments for which you supply values. |
| [x] | Square brackets enclose an optional element (keyword or argument). |
| | A vertical line indicates a choice within an optional or required set of keywords or arguments. |
| [x y] | Square brackets enclosing keywords or arguments separated by a vertical line indicate an optional choice. |
| {x y} | Braces enclosing keywords or arguments separated by a vertical line indicate a required choice. |

Nested sets of square brackets or braces indicate optional or required choices within optional or required elements. For example:

| Convention | Description |
|-------------|--|
| [x {y z}] | Braces and a vertical line within square brackets indicate a required choice within an optional element. |

Examples use the following conventions:

| Convention | Description |
|------------------------|--|
| screen | Examples of information displayed on the screen are set in Courier font. |
| boldface screen | Examples of text that you must enter are set in Courier bold font. |
| < > | Angle brackets enclose text that is not printed to the screen, such as passwords. |
| ! | An exclamation point at the beginning of a line indicates a comment line. (Exclamation points are also displayed by the Cisco IOS software for certain processes.) |
| [] | Square brackets enclose default responses to system prompts. |

The following conventions are used to attract the attention of the reader:



Caution

Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.



Note

Means *reader take note*. Notes contain helpful suggestions or references to materials not contained in this manual.



Timesaver

Means the *described action saves time*. You can save time by performing the action described in the paragraph.

Obtaining Documentation

The following sections explain how to obtain documentation from Cisco Systems.

World Wide Web

You can access the most current Cisco documentation on the World Wide Web at the following URL:

<http://www.cisco.com>

Translated documentation is available at the following URL:

http://www.cisco.com/public/countries_languages.shtml

Documentation CD-ROM

Cisco documentation and additional literature are available in a Cisco Documentation CD-ROM package, which is shipped with your product. The Documentation CD-ROM is updated monthly and may be more current than printed documentation. The CD-ROM package is available as a single unit or through an annual subscription.

Ordering Documentation

Cisco documentation is available in the following ways:

- Registered Cisco Direct Customers can order Cisco product documentation from the Networking Products MarketPlace:
http://www.cisco.com/cgi-bin/order/order_root.pl
- Registered Cisco.com users can order the Documentation CD-ROM through the online Subscription Store:
<http://www.cisco.com/go/subscription>
- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco corporate headquarters (California, USA) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

Documentation Feedback

If you are reading Cisco product documentation on Cisco.com, you can submit technical comments electronically. Click **Leave Feedback** at the bottom of the Cisco Documentation home page. After you complete the form, print it out and fax it to Cisco at 408 527-0730.

You can e-mail your comments to bug-doc@cisco.com.

To submit your comments by mail, use the response card behind the front cover of your document, or write to the following address:

Cisco Systems
Attn: Document Resource Connection
170 West Tasman Drive
San Jose, CA 95134-9883

We appreciate your comments.

Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain documentation, troubleshooting tips, and sample configurations from online tools by using the Cisco Technical Assistance Center (TAC) Web Site. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC Web Site.

Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information, networking solutions, services, programs, and resources at any time, from anywhere in the world.

Cisco.com is a highly integrated Internet application and a powerful, easy-to-use tool that provides a broad range of features and services to help you to

- Streamline business processes and improve productivity
- Resolve technical issues with online support
- Download and test software packages
- Order Cisco learning materials and merchandise
- Register for online skill assessment, training, and certification programs

You can self-register on Cisco.com to obtain customized information and service. To access Cisco.com, go to the following URL:

<http://www.cisco.com>

Technical Assistance Center

The Cisco TAC is available to all customers who need technical assistance with a Cisco product, technology, or solution. Two types of support are available through the Cisco TAC: the Cisco TAC Web Site and the Cisco TAC Escalation Center.

Inquiries to Cisco TAC are categorized according to the urgency of the issue:

- Priority level 4 (P4)—You need information or assistance concerning Cisco product capabilities, product installation, or basic product configuration.
- Priority level 3 (P3)—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- Priority level 2 (P2)—Your production network is severely degraded, affecting significant aspects of business operations. No workaround is available.
- Priority level 1 (P1)—Your production network is down, and a critical impact to business operations will occur if service is not restored quickly. No workaround is available.

Which Cisco TAC resource you choose is based on the priority of the problem and the conditions of service contracts, when applicable.

Cisco TAC Web Site

The Cisco TAC Web Site allows you to resolve P3 and P4 issues yourself, saving both cost and time. The site provides around-the-clock access to online tools, knowledge bases, and software. To access the Cisco TAC Web Site, go to the following URL:

<http://www.cisco.com/tac>

All customers, partners, and resellers who have a valid Cisco services contract have complete access to the technical support resources on the Cisco TAC Web Site. The Cisco TAC Web Site requires a Cisco.com login ID and password. If you have a valid service contract but do not have a login ID or password, go to the following URL to register:

<http://www.cisco.com/register/>

If you cannot resolve your technical issues by using the Cisco TAC Web Site, and you are a Cisco.com registered user, you can open a case online by using the TAC Case Open tool at the following URL:

<http://www.cisco.com/tac/caseopen>

If you have Internet access, it is recommended that you open P3 and P4 cases through the Cisco TAC Web Site.

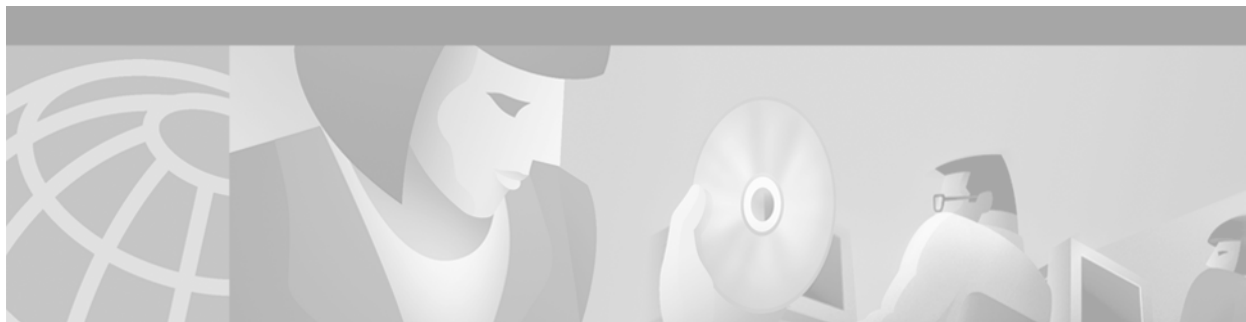
Cisco TAC Escalation Center

The Cisco TAC Escalation Center addresses issues that are classified as priority level 1 or priority level 2; these classifications are assigned when severe network degradation significantly impacts business operations. When you contact the TAC Escalation Center with a P1 or P2 problem, a Cisco TAC engineer will automatically open a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to the following URL:

<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>

Before calling, please check with your network operations center to determine the level of Cisco support services to which your company is entitled; for example, SMARTnet, SMARTnet Onsite, or Network Supported Accounts (NSA). In addition, please have available your service agreement number and your product serial number.



System Error Messages Overview

This publication lists and describes Cisco IOS system error messages. 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, and others may help diagnose problems with communications lines, internal hardware, or the system software.

This manual also includes error messages that appear when the system crashes.

Obtaining Technical Assistance

When the recommended action of an error message advises that you contact Cisco technical support, open a case with the Cisco Technical Assistance Center (TAC). Please see the section “Contacting TAC by Using the Cisco TAC Website” in the preface “About Cisco IOS Software.”

Additional Resources

The Cisco Technical Assistance Center (TAC) has made available to all registered users an online tool, the Cisco IOS Error Message Decoder, for researching and resolving error messages.

All you have to do is copy an error message or a command output from your screen and paste it into the appropriate text fields of the tool. Within moments, the tool responds with an interpretation of your text. The Cisco IOS Error Message Decoder makes it easy for you to distinguish between error messages that are purely informational and those that alert you to potential problems. This tool provides you with an explanation of the error message, a recommended action, and links to suggested online Cisco technical support resources. For help with researching and resolving your Cisco IOS error messages, try out the new Cisco IOS Error Message Decoder tool at <http://www.cisco.com/support/Errordecoder/error-decoder.html>.

How This Manual Is Organized

This manual contains three chapters:

- The “[System Error Messages](#)” chapter provides descriptions of error messages related to the Cisco IOS software, except for the CMCC facility. The messages are organized according to the particular system facility that produces the messages. The facility sections appear in alphabetical order, and within each facility section, messages are listed alphabetically by mnemonic. Each error message is followed by an explanation and a recommended action.
- The “[CMCC System Error Messages](#)” chapter provides descriptions of error messages related to the CMCC product family, which includes
 - The Channel Interface Processor (CIP)
 - The enhanced CIP (CIP2)
 - The Escon Channel Port Adapter (ECPA)
 - The enhanced ECPA (ECPA4)
 - The Parallel Channel Port Adapter (PCPA)
 - The Channel Port Adapter (CPA).

The format of CMCC error messages differs from the format of other system error messages. For more information on CMCC message format, see the “[CMCC System Error Messages](#)” chapter.

- The “[System Failure Messages](#)” chapter provides descriptions of error messages that appear when the system image crashes.

The CMCC system error messages appear in a separate index after the index for system error messages.

For alphabetizing purposes, lowercase and uppercase letters are treated the same.

The index of error messages is alphabetized as follows:

1. Facility code
2. Mnemonic
3. Severity level



Note

You can also view online system error messages that pertain to Cisco IOS Release 12.2-based releases. See the *Cisco IOS System Error Messages for 12.2*.

How to Read System Error Messages

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

```
%FACILITY-SUBFACILITY-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 hardware device, a protocol, or a module of the system software. [Table 1](#) lists the system facility 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: Interface [chars], undefined entry point
```

Some error messages also indicate the card and slot reporting the error. These error messages begin with a percent sign (%) and are structured as follows:

```
%CARD-SEVERITY-MSG:SLOT %FACILITY-SEVERITY-MNEMONIC: Message-text
```

`CARD` is a code that describes the type of card reporting the error. VIP and FEIP are possible card types.

`MSG` is a mnemonic that indicates that this is a message. It is always shown as `MSG`.

`SLOT` indicates the slot number of the card reporting the error. It is shown as `SLOT` followed by a number (for example, `SLOT5`).



Note

The prepended portion of the error message (`%CARD-SEVERITY-MSG:SLOT`) is not shown in the error message listings in this manual.

Table 1 Facility Codes

| Code | Facility |
|--------------|--|
| AAAA | TACACS+ authentication, authorization, and accounting security |
| ACLMERGE | Access control list merge |
| ADJ | Adjacency subsystem |
| AIP | ATM Interface Processor |
| ALARM | Telco chassis alarm related |
| ALC | ATM line card (ALC) |
| ALIGN | Memory optimization in Reduced Instruction Set Computer (RISC) processor |
| ALPS | Airline Protocol Support |
| AMD79C971_FE | Am79C971 Fast Ethernet device driver |
| AMDP2_FE | AMDP2 Ethernet and Fast Ethernet |
| AP | Authentication Proxy (AP) |
| ARAP | Apple Remote Access Protocol (ARAP) |
| AS5400 | Cisco AS5400 platform |
| AS5400_ENVM | Cisco AS5400 environmental monitor |
| ASPP | Asynchronous Security Protocol (ASPP) |
| AT | AppleTalk (AT) |
| ATM | Asynchronous Transfer Mode |
| ATMCES | ATM access concentrator PCI port adapter driver |

Table 1 Facility Codes (continued)

| Code | Facility |
|------------------------------|--|
| ATMCORE | ATM core |
| ATMOC3 | ATM OC-3 network module |
| ATMPA | ATM port adapter |
| ATMSIG | ATM signaling subsystem |
| ATMSSCOP | ATM Service Specific Connection Oriented Protocol (SSCOP) |
| AUTORP | PIMv2 AUTORP |
| BAP | PPP Bandwidth Allocation Protocol (BAP) |
| BCM3220 | Cable modem MAC controller interface |
| BGP | Border Gateway Protocol |
| BIT | Dynamic bitlist |
| BRI | ISDN Basic Rate Interface |
| BRIMUX | Cisco AS5200 BRIMUX board |
| BSC | Binary Synchronous Communications protocol |
| BSTUN | Block serial tunneling (BSTUN) |
| C1400_PCI | Protocol control information (PCI) bus for Cisco 1400 platform |
| C1600 | Cisco 1600 platform |
| C1700 | Cisco 1700 platform |
| C1700_EM | Cisco 1700 VPN module hardware accelerator for IP security |
| C2600 | Cisco 2600 platform |
| C2600_MAINBOARD_ASYNC_PQUICC | MPC860 quad integrated communications controller for the Cisco 2600 platform |
| C29ATM | Catalyst 2900XL ATM module |
| C2KATM | Catalyst 2820 ATM module |
| C3600 | Cisco 3600 platform |
| C4GWY_DSPRM | DSP Resource Manager |
| C542 | Voice driver for modular access routers |
| C54X | VoIP driver |
| C54x | VoIP DSP driver |
| C5RSP | Cisco Catalyst 5000 platform |
| C6KENV | Cisco Catalyst 6000 environmental system |
| C6KPWR | Cisco Catalyst 6000 power control system |
| C6MSFC | C6MSFC (Draco) |
| C6SUP | C6SUP-specific |
| C7200_TDM | Cisco 7200 midplane TDM bus |
| CAIM | Compression Advanced Interface Module (CAIM) |
| CALL_CONTROL | Call control |
| CALL_MGMT | Call management subsystem |

Table 1 Facility Codes (continued)

| Code | Facility |
|-------------------------------------|--|
| CALLPROG | Call progress notification subsystem |
| CALLRECORD | Modem Call Record |
| CALLTRKR | Call Tracker subsystem |
| CARRIER | DFC carrier |
| CASA | Cisco Appliance and Services Architecture (CASA) |
| CBUS | ciscoBus controller |
| CCH323 | Call Control for H323 |
| CCPROXY | H323 proxy |
| CDM | Cable Data Modem subsystem |
| CDP | Cisco Discovery Protocol (CDP) |
| CE3 | CE3 port adapter (CE3) |
| CES | Circuit Emulation Service (CES) |
| CHOPIN | Cisco Chopin |
| CHOPIN_ MAINBOARD_ ASYNC_PQII | Chopin Main Board Asynchronous driver |
| CI | Cisco 7500 platform chassis interface |
| CIPDUMP | CIP core dump |
| CIRRUS | CD2430 asynchronous controller |
| CIRRUS_PM | Slow-speed asynchronous/synchronous port module |
| CLEAR | Clear facility |
| CLNS | OSI Connectionless Network Service |
| CLOCKSW | Cisco 6400 network clocking |
| CLS | Cisco link services (CNS) |
| CLSDR | Cisco link services (CNS) driver |
| CM622_CM155 | ATM OC12 and QOC3 line card driver |
| CMAPP | Call Manager application |
| CMCC | Cisco Mainframe Channel Connection interfaces |
| CM_DSPRM | Digital Signal Processor Resource Manager (DSPRM) |
| CM_MONITOR | UBR900 Cable Access Router Personal Monitor |
| CNS_AGENT_ CFGCHG | Cisco Network Service (CNS) Configuration Change Agent |
| CNSES | Cisco Network Services Event Service client |
| COMP | Point-to-point compression |
| CONTROLLER | Controller |
| COT | Continuity test (COT) |
| CPAD | Compression service adapter (CSA) |

Table 1 Facility Codes (continued)

| Code | Facility |
|-----------------|---|
| CPM | Combo Port Module (CPM) device driver |
| CRYPTO | Encryption |
| CSM | Call switching module |
| CSM_VOICE | Call switching mode (CSM) voice subsystem |
| CT3 | Channelized T3 (CT3) port adapter |
| CTRC | Cisco Transaction Connection |
| CWAN_ATM | Constellation WAN ATM |
| CWANLC | Constellation WAN line card |
| CWANLC_ATM | Constellation WAN ATM Route Processor driver |
| CWAN_RP | Constellation WAN ATM Route Processor driver |
| CWPA | Route Processor for Constellation Supervisor router module |
| CWTLC | Constellation Supervisor router module line card |
| CWTLC_ATM | ATM line card for Constellation Supervisor router module |
| DBCONN | Database Connection |
| DBUS | Data bus |
| DCU | ATM access concentrator PCI port adapter |
| DEC21140 | DEC21140 Fast Ethernet controller |
| DFC | Dial feature card |
| DFC_CARRIER | Dial feature card carrier |
| DHCPD | Dynamic Host Configuration Protocol (DHCP) server |
| DIALER | Dial-on-demand routing |
| DIALPEER_DB | Dial peer configuration |
| DIALSHELF | Dial shelf messages |
| DIRECTOR | Director server |
| DLC | Data-link control |
| DLSWC | Data-link switching (DLSw) |
| DLSWMasterSlave | Data-link switching (DLSw) core |
| DLSWP | Data-link switching (DLSw) peer module |
| DMA | Direct memory access |
| DMTDSL | Digital/discrete multitone digital subscriber line (DMTDSL) |
| DNET | DECnet |
| DNSSERVER | Domain Name System (DNS) server |
| DPM | AS5200 T1 BRIMUX |
| DRIP | Duplicate Ring Protocol |
| DRP | Director Response Protocol |
| DRVGRP | Interface driver |

Table 1 Facility Codes (continued)

| Code | Facility |
|----------------|---|
| DSC | Dial shelf controller (DSC) |
| DSCC4 | DSCC4 driver |
| DSCCLOCK | Dial shelf controller (DSC) clock |
| DSC_ENV | Cisco AS5800 environment monitor |
| DSCEXTCLK | Dial shelf controller (DSC) clock |
| DSCREDCLK | Dial shelf controller (DSC) redundancy clock |
| DSC_REDUNDANCY | Cisco AS5800 dial shelf controller (DSC) redundancy |
| DSI | Cisco AS5800 dial shelf interconnect board |
| DSIP | Distributed system interconnect protocol |
| DSIPPF | Nitro Interconnect Protocol |
| DS_MODEM | FB modem card |
| DSPDD | Digital Signal Processor Device Driver (DSPDD) |
| DSPRM | Digital Signal Processor Device Driver (DSPDD) |
| DSPU | Downstream physical unit |
| DS_TDM | Dial shelf time-division multiplexing |
| DSX0 | CT1 RBS time slot status |
| DSX1 | Channelized E1 (Europe) and T1(US) telephony standard |
| DTP | Dynamic Trunking Protocol filtering |
| DUAL | Enhanced Interior Gateway Routing Protocol |
| DVMRP | Distance Vector Multicast Routing Protocol |
| E1T1_MODULE | E1T1 module |
| EC | Port Aggregation Protocol |
| EGP | Exterior Gateway Protocol |
| EHSA | Cisco 6400 Enhanced High System Availability (EHSA) |
| ENSP | Enhanced Network Services Provider (ENSP) |
| ENT_API | Entity MIB API |
| ENVM | Environmental monitor |
| ENV_MON | Cisco 12000 environmental monitor |
| EPAD | Encryption port adapter driver (EPAD) |
| ESWITCH | Ethernet switch port adapter |
| ETHERNET | Ethernet for the C1000 series |
| EVENT | Event MIB |
| EXPRESSION | Expression MIB |
| FABRIC | Fabric Interface ASIC (FIA) |
| FALLBACK | VoIP fallback |
| FAN | Fan |

Table 1 Facility Codes (continued)

| Code | Facility |
|-----------------|--|
| FASTBLK | Fast Block |
| FB | Cisco AS5800 feature board |
| FB_COREDUMP | Feature board core dump |
| FBINFO | Cisco AS5800 feature board crash information subsystem |
| FDDI | Fiber Distributed Data Interface (FDDI) |
| FECPM | Fast Ethernet (FE) Combination Port Module (CPM) device driver |
| FIB | IP Cisco Express Forwarding (CEF) radix tree |
| FILESYS | File system |
| FLASH | Flash nonvolatile memory |
| FM | Feature Manager (FM) |
| FPGA | LS1010 chip-specific |
| FR | Frame Relay |
| FREEDM | CT3 trunk card Freedm |
| FR_ELMI | Frame Relay enhanced Local Management Interface |
| FR_FRAG | Frame Relay Fragmentation |
| FR_LMI | Frame Relay Local Management Interface |
| FS_IPHC | Fast IP Header Compression |
| FTC_TRUNK | Cisco 3801 platform |
| FTPSERVER | FTP server processes |
| FTSP | Fax Telephony Service Provider subsystem |
| FW | Inspection subsystem |
| FX1000 | FX1000 Gigabit Ethernet controller |
| GK | GK-H.323 Gatekeeper |
| GLCFR | Internet router |
| GPRSFLTGM | Global Packet Radio Service Fault Management |
| GPRSMIB | Global Packet Radio Service MIB |
| GRIP | Xerox Network Systems (XNS) Routing Protocol |
| GRP | Gigabit Route Processor |
| GRPGE | Gigabit Ethernet Route Processor (RP) |
| GRP_OC12_CH_DS3 | Gigabit Route Processor (GRP) driver |
| GRPPOS | POS Route Processor |
| GSR_ENV | Internet router environment monitor |
| GSRIPC | Internet router IPC service routines |
| GT64010 | GT64010 DMA controller driver |
| GTP | GPRS Tunnel Protocol |
| HAWKEYE | Token Ring PCI port adapter |

Table 1 Facility Codes (continued)

| Code | Facility |
|---------------|--|
| HD | HD64570 serial controller |
| HDV | High Density Voice (HDV) driver |
| HDX | Half-duplex (HDX) finite state machines (FSM) |
| HEARTBEAT | Heartbeat |
| HMM_ASYNC | Hex modem network module asynchronous driver |
| HOOD | LAN controller 100VG-AnyLAN interface |
| HP100VG | 100VG-AnyLAN port adapter driver |
| HTSP | Analog voice hardware adaptation layer software |
| HUB | Cisco Ethernet hub |
| HW_VPN | Encryption Advanced Interface Module (EAIM) |
| I82543 | Intel 82543 Ethernet/Fast Ethernet/Gigabit Ethernet controller |
| IBM2692 | IBM Token Ring chipset |
| ICC | Inter-Card Communication |
| IDMGR | ID manager |
| IDS | IP datagram subsystem (IDS) |
| IDTATM25 | IDT ATM25 network module |
| IF | Interface |
| IFS | Cisco IOS file system |
| IGRP | Interior Gateway Routing Protocol |
| ILACC | ILACC driver |
| IMA | Inverse multiplexing over ATM (IMA) |
| INTERFACE_API | Binary API for the interface descriptor block |
| IOCARD | I/O card-specific |
| IP | Internet Protocol |
| IPA | Intelligent port adapter |
| IPACCESS | IP security |
| IPC | Interprocess communication |
| IPCGRP | Route Processor (RP) interprocess communication (IPC) |
| IPCLC | Internet router line card interprocess communication |
| IPC_RPM | Interprocess communication (IPC) |
| IPC_RSP_CBUS | Interprocess communication ciscoBus (CBUS) |
| IPFAST | IP fast switching |
| IPFLOW | IP flow |
| IPM_C54X | Voice over IP (VoIP) driver |
| IPMCAST | Cisco 12000 Series Internet router line card IP multicast |
| IPM_DSPRM | Digital Signal Processor (DSP) Resource Manager |

Table 1 Facility Codes (continued)

| Code | Facility |
|---------------|---|
| IPM_NV_EEPROM | Integrated port module NVRAM driver |
| IPMOBILE | IP Mobility |
| IPRT | IP routing |
| IP_SNMP | Simple Network Management Protocol specific to IP |
| IPX | Novelle Internetwork Packet Exchange Protocol (IPX) |
| ISA | Integrated Services Adapter (ISA) |
| ISDN | Integrated Services Digital Network (ISDN) |
| IVR | Interactive Voice Response (IVR) |
| KERBEROS | Voice over IP (VoIP) for Cisco AS5800 |
| KINEPAK | Voice over IP (VoIP) for Cisco AS5800 |
| L2CAC | Layer 2 CAC |
| L2R | L2RLY |
| L3_MGR | Layer 3 manager |
| LANCE | Local Area Network Controller Ethernet |
| LANE | LAN Emulation |
| LANMGR | IBM LAN Network Manager |
| LAPB | X.25 Link Access Procedure, Balanced |
| LAPP_OFF | Fax offramp calls |
| LAPP_ON_MSGS | Fax onramp calls |
| LAT | DEC local-area transport |
| LC | Line card (LC) |
| LCB | Line Control Block (LCB) event process |
| LCCEF | ATM Cisco Express Forwarding (CEF) adjacency |
| LCCOREDUMP | Line card core dump subsystems |
| LCFE | Fast Ethernet line card (LC) driver |
| LCGE | Gigabit Ethernet line card (LC) driver |
| LCINFO | Line card crash information subsystem |
| LCLOG | Internet router line card logger subsystem |
| LCOC12_CH_DS3 | Internet router OC-12-channelized-to-D3 line card |
| LCPLIM | Line card physical layer interface module |
| LCPOS | Packet over SONET (POS) line card driver |
| LES_FDDI | LAN Emulation Server/Fiber Distributed Data Interface |
| LEX | LAN extension |
| LIBT2F | Text to fax library |
| LIBTIFF | Tagged Image File Format (TIFF) library |
| LINECARD | Node Route Processor (NRP) line card |

Table 1 Facility Codes (continued)

| Code | Facility |
|---------------------|---|
| LINEPROTO | Line Protocol |
| LINK | Data link |
| LLC | Logical Link Control (LLC), type 2 |
| LLIST | Linked list facility |
| LNMC | LAN network manager |
| LPD | Line printer daemon |
| LSS | LS Switching error message definition |
| M32X | M32X Basic Rate Interface trunk card |
| MAILBOX | ChipCom mailbox support |
| MBRI | Multi-BRI port modules |
| MBUS | Maintenance bus (Mbus) |
| MBUS_SYS | Maintenance bus (Mbus) system |
| MC3810_DSX1 | MC3810 DSX1 subsystem |
| MCAST | Layer 2 multicast |
| MDS | Multicast distributed switching |
| MEMSCAN | Memory scan |
| MGCP | Media Gateway Control Protocol |
| MGCP_APP | Media Gateway Control Protocol application-specific |
| MICA | Modem ISDN Channel Aggregation (MICA) |
| MIF68840 | PCI MC68840 FDDI port adapter |
| MIMIC | MCOM integrated modem network modules |
| MISTRAL | Mistral ASIC |
| MK5 | MK5025 serial controller |
| MMODEM | Integrated modem network module |
| MODEM | Router shelf modem management |
| MODEMCALL RECORD | Modem Call Record |
| MODEM_HIST | Router shelf modem history and tracing |
| MODEM_NV | Modem NVRAM |
| MPA68360 | VIP Multi-channel Port Adapter |
| MPLS_ATM_TRANS | ATM Transport over MPLS |
| MPLS_TE | Label Switch Path (LSP) tunnel |
| MPLS_TE_PCALC | MPLS TE path calculation facility |
| MPOA | Multiprotocol over ATM (MPOA) |
| MROUTE | Multicast route |
| MSDP | Multicast Source Discovery Protocol |
| MSPI | Mail Service Provider |

Table 1 Facility Codes (continued)

| Code | Facility |
|-------------------------------|--|
| MUESLIX | Mx serial application-specific integrated circuit (ASIC) |
| MXT_FREEDM | 8PRI/4T board |
| NBAR | Network-based application recognition (NBAR) |
| NET_SERV | Networking Services |
| NETWORK_CLOCK_SYNCHRONIZATION | Network clock synchronization |
| NHRP | Next Hop Resolution Protocol |
| NIM | Network interface module |
| NP | NextPort (NP) |
| NP_BS | NextPort (NP) Bootstrap and Crash Monitor |
| NP_EST | NextPort (NP) |
| NP_MD | NextPort modem driver |
| NP_MM | NextPort module manager |
| NP_SPE_DS | NextPort Dial Shelf Service Processing Element (SPE) Manager |
| NP_SSM | NextPort Session and Service Manager |
| NRP | Network Routing Processor (NRP) |
| NSE | Network services engine |
| NSP | Network Switch Processor (NSP) |
| NSP_APS | Cisco 6400 node switch processor (NSP) |
| NSPINT | Network switch processor (NSP) interrupt infrastructure |
| NSP_OIR | Cisco 6400 online insertion and removal (OIR) |
| OIR | Online insertion and removal (OIR) |
| OOBP | Out-of-band port (OOBP) |
| OSPF | Open Shortest Path First (OSPF) |
| PA | Port adapter |
| PAD | X.25 packet assembler/disassembler |
| PAMMBOX | Platform-independent PAM mailbox serial interface |
| PARSER | Parser |
| PERUSER | PPP per-user configuration |
| PF | Protocol filtering |
| PGM | Pragmatic General Multicast (PGM) |
| PGMHOST | Pragmatic General Multicast (PGM) host module |
| PIM | Protocol Independent Multicast |
| PLATFORM | Platform-specific |
| PM | Port Manager |
| PM_MODEM_HIST | Modem history and tracing |
| PM_MODEM_MAINT | Modem maintenance |

Table 1 Facility Codes (continued)

| Code | Facility |
|--------------------|--|
| PNNI | Private Network-Network Interface |
| PORT | Port Management |
| POSDW | Packet over SONET double-wide PCI port adapter driver |
| POSLC | Packet over SONET line card |
| POT1E1 | Versatile Interface Processor (VIP) multichannel port adapter |
| POTS | Plain old telephone service (POTS) |
| PPP | Point-to-Point Protocol (PPP) |
| PQII | MPC860 quad integrated communications controller |
| PQUICC | MPC860 quad integrated communications controller |
| PQUICC_ASYNC | Asynchronous MPC860 quad integrated communications controller |
| PQUICC_ASYNC_NOMEM | Integrated Port Module Asynchronous Driver |
| PQUICC_ETHER | Ethernet MPC860 quad integrated communications controller |
| PQUICC_ETHERNET | Ethernet MPC860 quad integrated communications controller |
| PQUICC_FE | Fast Ethernet MPC860 quad integrated communications controller |
| PQUICC_SERIAL | Serial MPC860 quad integrated communications controller |
| PS | Power supply |
| PV | Private VLAN |
| PW_WATCHER | Portware Watcher |
| PXF | Parallel eXpress Forwarding |
| QA | Queue and accumulator |
| QEM | QEM driver |
| QLLC | Qualified Logical Link Control |
| QM | Quality of service |
| QUICC | MC68360 quad integrated communications controller |
| QUICC_ASYNC | Asynchronous MC68360 quad integrated communications controller |
| QUICC_ETHER | Ethernet MC68360 quad integrated communications controller |
| QUICC_SERIAL | Serial MC68360 quad integrated communications controller |
| RAC | Ring Access Controller |
| RADIO | Radio driver |
| RADIO_DRIVER | Radio driver |
| RADIUS | RADIUS |
| RADIX | Radix |
| RAIKO | RAIKO-based feature board |
| RCMD | Remote command |
| Regen | Cisco optical regenerator |

Table 1 Facility Codes (continued)

| Code | Facility |
|------------------------------|---|
| Regen_MAINBOARD_ASYNC_PQUICC | Asynchronous MPC860 quad integrated communications controller for the Cisco optical regenerator |
| REGISTRY | Registry |
| RESOURCE_MON | Resource monitor subsystem |
| RESYNCH | Route Processor Module (RPM) resynchronization process |
| RIP | IP Routing Information Protocol (RIP) |
| RLM | Redundant Link Manager (RLM) |
| RM | Resource Manager |
| ROUTEMAP_IPC | Route map interprocess communication (IPC) |
| RPA | Resource Pool Allocation (RPA) |
| RPC | Remote Procedure Call |
| RPM | Route Processor Module (RPM) |
| RP_MLP | Distributed Point-to-Point Protocol (PPP) Multilink |
| RPM_VIRTUAL_PORT | RPM virtual port |
| RPS | Redundant power system |
| RSP | Route Switch Processor |
| RSRB | Remote source-route bridging |
| RS_TDM | Router shelf time-division multiplexing |
| RTT | Round trip time monitor |
| RUDP | Reliable User Datagram Protocol |
| S4T68360 | Four-port synchronous serial adapter based on the 68360 processor |
| SARMGR | Segmentation and reassembly (SARMGR) |
| SCCP | Signaling connection control part |
| SCHED | Scheduler |
| SCP | Downstream physical unit (DSPU) |
| SDLC | Synchronous Data Link Control |
| SDLLC | Synchronous Data Logical Link Control (SDLLC) Logical Link Control Type 2 (LLC2) translation |
| SEC | IP security |
| SERVICE_MODULE | Service module |
| SGBP | Stack Group Bidding Protocol |
| SGCP | Simple Gateway Control Protocol (SGCP) |
| SGCP_APP | Simple Gateway Control Protocol (SGCP) application-related |
| SHELF | Router shelf |
| SIGSM | Signaling Service Manager |
| SLB | Server load balancing |

Table 1 Facility Codes (continued)

| Code | Facility |
|---------------|---|
| SLB_DFP | Server Load Balancing Dynamic Feedback Protocol agent |
| SLIP | Serial Line Internet Protocol |
| SLOTDUMP | Slot dump |
| SM | State machine (SM) |
| SMF | Software MAC Filter |
| SMRP | Simple Multicast Routing Protocol |
| SNAPSHOT | Snapshot dial-on-demand routing |
| SNASW | Systems Network Architecture (SNA) Switching Services |
| SNMP | Simple Network Management Protocol (SNMP) |
| SNMP_MGR | Simple Network Management Protocol (SNMP) proxy |
| SOI | Simple Network Management Protocol (SNMP) over interprocess communication (IPC) |
| SONET | Synchronous Optical Network |
| SONETMIB | Synchronous Optical Network Management Information Base |
| SONICT | SONIC Ethernet interface-related |
| SPAN | Spanning Tree Protocol |
| SPANTREE | Spanning Tree |
| SPANTREE_FAST | Spanning Tree Fast Convergence |
| SPARC | 3800 SPARC coprocessor subsystem |
| SPE | Service Processing Element (SPE) |
| SRCP_APP | Simple Resource Coordination Protocol (SRCP) application |
| SRP | Spatial Reuse Protocol (SRP) |
| SSE | Silicon switching engine |
| SSH | Secure Shell (SSH) Protocol |
| SSRP | SONET/SDH based SRP Double Wide PCI port adapter driver |
| STANDBY | Hot Standby Router Protocol (HSRP) |
| STUN | Serial tunneling |
| SUBSYS | Software subsystems |
| SW56 | Switch 56K |
| SWITCH | Switch interface |
| SW_VLAN | Virtual LAN (VLAN) manager |
| SYS | Operating system |
| SYSCTLR | System controller subsystem |
| SYSLOG_SERVER | Syslog-server file system routines |
| SYSMGT_RPC | System management |
| TIE1SUNI | PAM port driver |
| TAC | Terminal Access Controller Access Control System |

Table 1 Facility Codes (continued)

| Code | Facility |
|----------------------------|--|
| TAGCON | Tag distribution and control |
| TAGCOS | Tag switching class of service |
| TBRIDGE | Transparent bridging |
| TCATM | ATM TAG control |
| TCP | Transmission Control Protocol |
| TDM | Time-division multiplexing (TDM) |
| TDM_CLOCK_ SYNCHRONIZATION | Time-division multiplexing (TDM) frame clock |
| TDP | Tag Distribution Protocol |
| TESTPA | TestPA port adapter |
| TFIB | Tag Forwarding Information Base |
| TI1570 | PCI/TI1570-based ATM port adapter |
| TIB | Tag Information Base |
| TIGER | Error-correcting code (ECC) and parity-related |
| TLV | EEPROM |
| TMQ | Inbound terminal port queuing |
| TN | Telnet |
| TN3270 | TN3270 protocol |
| TR | Token Ring |
| TRUNK | E1/T1 trunk card |
| TRUNK_CLOCK | AS5400 clocking |
| TRUNK_DFC | Trunk dial feature card |
| TSP | Tag-switched path (TSP) |
| TTY | Tty-related for all platforms |
| TTYDRIVER | Router shelf asynchronous driver |
| TUN | Tunnel |
| TXCONN | Cisco Transaction Connection (CTRC) |
| UBR7200 | Cable modem termination system |
| UCODE | Microcode |
| UDLD | UniDirectional Link Detection (UDLD) protocol |
| UNIX | UNIX |
| UTIL | Utility |
| VFC | Voice over IP (VoIP) |
| VINES | Banyan VINES |
| VIP | Versatile Interface Processor |
| VIPMLP | Multilink PPP |
| VOICE_FSM | MC3810 voice FSM subsystem |

Table 1 Facility Codes (continued)

| Code | Facility |
|--------------|--|
| VOICE_RC | MC3810 voice resource subsystem |
| VOIPAAA | VoIP AAA |
| VPA | Voice port adapter |
| VPD | ATM CES (Voice Processor Deck) driver |
| VPDN | Virtual Private Dialup Networking |
| VSI_M | Virtual Switch Interface (VSI) master |
| VTSP | Voice Telephony security parameter index (SPI) |
| WCCP | Web Cache Communication Protocol (WCCP) |
| X25 | X.25 |
| XCCTSP_VOICE | External Call Control Telephony Service Provider |
| XCPA | Mainframe Channel Port Adapter |
| XTAGATM | Extended Tag ATM (XTagATM) |

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 Cisco IOS configuration guide and command reference publications.

Table 3 Representation of Variable Fields in Error Messages

| Representation | Type of Information |
|-----------------|--|
| [atalk_address] | AppleTalk address |
| [atalk_net] | AppleTalk network, either 600 or 600-601 |
| [char] | Single character |
| [chars] | Character string |
| [dec] | Decimal number |

Table 3 *Representation of Variable Fields in Error Messages (continued)*

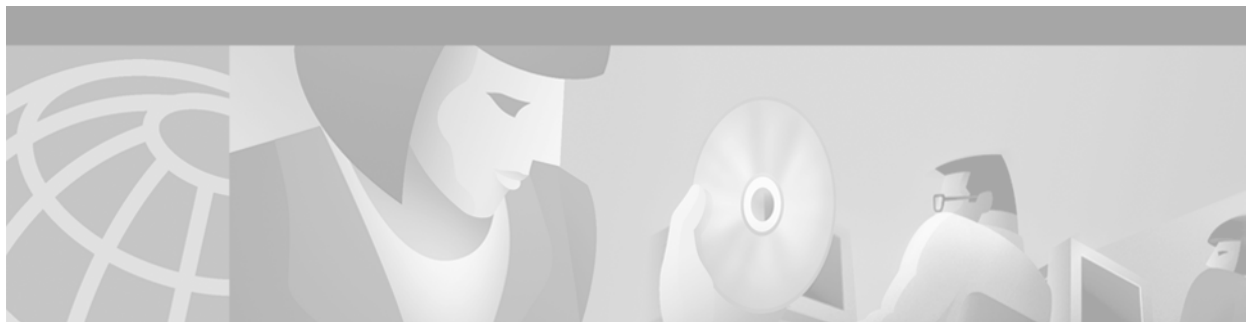
| Representation | Type of Information |
|-----------------------|--|
| [enet] | Ethernet address (for example, 0000.FEED.00C0) |
| [hex] | Hexadecimal number |
| [inet] | Internet address (for example, 10.0.2.16) |
| [int] | Integer |
| [node] | Address or node name |
| [sci_notation] | Scientific notation |
| [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) |

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

NSP_APS Messages

The following are Cisco 6400 node switch processor (NSP) automatic protection switching (APS) error messages.

Error Message

```
%NSP_APS-4-SWITCH: Interface [chars] switched from [chars] to [chars] channel
```

Explanation The APS logic has determined that a switchover from one port to another was necessary and has switched the specified interface to another port.

Recommended Action No action is required.

NSPINT Messages

The following are network switch processor (NSP) interrupt infrastructure error messages.

Error Message

```
%NSPINT-3-INTERNAL_ERROR: no handler for index [dec]
```

Explanation An internal error has occurred. An interrupt has been detected for which no handler has been registered.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%NSPINT-5-SPURIOUS: Spurious level [dec] interrupt ([dec])
```

Explanation An interrupt has been detected for which no cause could be found.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

NSP_OIR Messages

The following are Cisco 6400 online insertion and removal (OIR) error messages.

Error Message

```
%NSP_OIR-3-ALOC_OIR_EVENT: OIR event structure allocation failure
```

Explanation An internal OIR element allocation failure has occurred. This error usually indicates a memory leak.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information. Restart and reboot the device at a convenient time. This problem will not affect normal operation; however, you will be unable to remove old hardware or insert new hardware and bring it online.

Error Message

```
%NSP_OIR-3-BADCARD: Unrecognized Card, Driver for Card not available in system software, ignoring card type [hex]
```

Explanation The card that was inserted into the system was not recognized by the software.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NSP_OIR-3-BAD_FULL_INS: Cannot enable half height card, redundancy conflict
```

Explanation A redundancy or card conflict with cards in an adjacent slot has occurred.

Recommended Action No action is required.

Error Message

%NSP_OIR-3-BAD_HALF_INS: Cannot enable half height card, redundancy conflict

Explanation A redundancy or card conflict with cards in an adjacent slot has occurred.

Recommended Action No action is required.

Error Message

%NSP_OIR-3-BADINS: Insufficient system resources to complete card insertion/redundancy request, Reverting Configuration

Explanation The internal data structures for the specified interface could not be allocated.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%NSP_OIR-6-FULL_CINS: Card [chars] inserted into slot: [dec]

Explanation A full card has been inserted into the slot.

Recommended Action No action is required.

Error Message

%NSP_OIR-6-FULL_CREM: Card [chars] removed from slot: [dec]

Explanation A full card has been removed from the slot.

Recommended Action No action is required.

Error Message

%NSP_OIR-6-FULL_ONLINE: Card [chars], slot: [dec], being brought online

Explanation A full card is being brought online.

Recommended Action No action is required.

Error Message

%NSP_OIR-6-HALF_CINS: Card [chars] inserted into subslot: [dec]/[dec]

Explanation A half-height card has been inserted into the subslot.

Recommended Action No action is required.

Error Message

%NSP_OIR-6-HALF_CREM: Card [chars] removed from subslot: [dec]/[dec]

Explanation A half-height card has been removed from the subslot.

Recommended Action No action is required.

Error Message

%NSP_OIR-6-HALF_ONLINE: Card [chars], subslot: [dec]/[dec], being brought online

Explanation A half-height card is being brought online.

Recommended Action No action is required.

Error Message

%NSP_OIR-3-INV_CARD: Inserted card incompatible with previously removed card

Explanation The card that was inserted is not the same type as the card that was removed and is therefore invalid.

Recommended Action Insert a card similar to the one that was removed, or clear out the alarm source.

Error Message

%NSP_OIR-3-INV_HWCFG1: Invalid card/configuration in slot([dec]) Ignoring Card

Explanation The cards that are present in the chassis in the current mode are incompatible.

Recommended Action Remove the card that is causing the problem and clear out the alarm sources. Ensure that the cards are compatible; otherwise, they cannot run redundantly.

Error Message

%NSP_OIR-3-INV_HWCFG2: Cannot enable card slot([dec]) subslot redundancy is active on subcard in slot([dec])

Explanation The cards that are present in the chassis in the current mode are incompatible.

Recommended Action Remove the card that is causing the problem and clear out the alarm sources. Ensure that the cards are compatible; otherwise, they cannot run redundantly.

Error Message

%NSP_OIR-4-INV_REDCFG: Redundancy submode not present!

Explanation The system configuration does not have the redundancy submode.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NSP_OIR-3-LONGSTALL: Long bus stall ([int] s)
The newly inserted card may not seated properly.
Please remove it and try again.
```

Explanation The newly inserted card has failed or is not properly seated.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%NSP_OIR-4-UNEXPECTED_OFFLINE: 6400 Card [dec]/[dec] found off line - will
'virtually'
remove and reinsert to bring online
```

Explanation The specified card has gone offline. This problem may have been caused by a power loss.

Recommended Action The software will bring the card back online. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

OIR Messages

The following are online insertion and removal (OIR) error messages.

Error Message

```
%OIR-6-CONSOLE: Changing console ownership to [chars] processor\n\n\n
```

Explanation The OIR facility has switched the console to the specified processor.

Recommended Action No action is required.

Error Message

```
%OIR-4-NOEOIR: [chars] [chars] version [int].[int] not capable of EOIR
```

Explanation The specified card is capable of OIR hot-swapping but is not capable of EOIR. Although no damage to the hardware will occur, insertion or removal of the card will cause a CBUS complex restart, which would be disruptive to traffic on other cards in the system.

Recommended Action Restrict insertion or removal of this card to times when a CBUS complex restart will be least disruptive. Alternatively, upgrade the card to the latest revision that supports EOIR.

Error Message

%OIR-3-PWRCYCLE: Card in slot [dec], is not responding; it is being power-cycled

Explanation The OIR facility has detected that the line card is unresponsive and has attempted to power-cycle the card.

Recommended Action No action is required.

Error Message

%OIR-3-SEATED: Insert/removal failed for slot [dec], check card seating

Explanation The OIR facility has detected an incorrectly seated card, which has caused the insertion or removal of this card to fail.

Recommended Action Reseat the card in the specified slot.

Error Message

%OIR-3-UNKNOWN: Unknown card in slot [dec], card is being disabled

Explanation The OIR facility has detected a line card, but could not determine the type.

Recommended Action Reseat the card in the specified slot.

OOBP Messages

The following are out-of-band port (OOBP) error messages.

Error Message

%OOBP-4-ASYNC_NO_RSP: Warning -- reset async oobp no response

Explanation The asynchronous driver does not respond to the **async reset** command.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%OOBP-4-OOBP_CANT_BE_USED: Warning -- oobp can't be used

Explanation The asynchronous driver cannot send out the OOBP message because there is no resource.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%OOBP-4-TIMEOUT_AT_WRONG_STATE: Warning -- OOBP driver timeout at wrong state
```

Explanation An OOBP response timeout occurred at the wrong OOBP state.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

OSPF Messages

The following are Open Shortest Path First (OSPF) error messages.

Error Message

```
%OSPF-5-ADJCHG: Process [dec], Nbr [IP_address] on [chars] from [chars] to [chars], [chars]
```

Explanation An OSPF neighbor has changed state. The message describes the change and the reason for it. This message appears only if the **log-adjacency-changes** command is configured for the OSPF process.

Recommended Action No action is required.

Error Message

```
%OSPF-6-AREACHG: [IP_address][IP_netmask] changed from area [chars] to area [chars]
```

Explanation An OSPF configuration change has caused a network range to change areas.

Recommended Action No action is required.

Error Message

```
%OSPF-6-BADCHKSUM: Checksum Failure in database in area [chars]  
Link State Id [IP_address] Old Checksum [hex] New Checksum [hex]\n
```

Explanation OSPF has detected a checksum error in the database that was caused by memory corruption.

Recommended Action Restart the OSPF process.

Error Message

```
%OSPF-4-BADLENGTH: Invalid length [dec] in OSPF packet from [IP_address] (ID
[IP_address]), [chars]
```

Explanation The system has received an OSPF packet with a field length of less than normal header size or a field length that is inconsistent with the size of the IP packet in which the OSPF packet arrived. This problem indicates an error involving the sender of the packet.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%OSPF-4-BADLSATYPE: Invalid lsa: [chars] Type [dec], LSID [IP_address] from
[IP_address], [IP_address], [chars]
```

Explanation The router has received an LSA with an invalid LSA Type. The cause is either memory corruption or unexpected behavior on a router.

Recommended Action Locate the problem router from a neighboring address and reboot it. To determine what is causing this problem, contact your Cisco technical support representative for assistance.

Error Message

```
%OSPF-4-CONFLICTING_LSaid: Found LSA with the same host bit set but using
different mask
Existing: LSA ID [IP_address][IP_netmask]
New: Destination [IP_address][IP_netmask]
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%OSPF-3-DBEXIST: area [chars] lsid [IP_address] mask [IP_address] adv [IP_address]
type [dec]
```

Explanation OSPF is having a problem locating the LSA. This condition could lead to a memory leak.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OSPF-3-DUP_RTRID: OSPF detected duplicate router-id [IP_address] from [IP_address] on interface [chars]

Explanation OSPF has received hello packet from a neighbor that has the same router ID as this routing process. A full adjacency cannot be established.

Recommended Action The OSPF router ID should be unique. Change the router ID of the neighbor.

Error Message

%OSPF-4-DUP_RTRID_AREA: Detected router with duplicate router ID [IP_address] in area [chars]

Explanation OSPF has received a hello packet from a neighbor that has the same router ID as this routing process. Duplicate router IDs may result in network instability, causing some destinations to be unreachable.

Recommended Action The OSPF router ID should be unique. Ensure that all routers in the area have a unique router ID.

Error Message

%OSPF-4-DUP_RTRID_NBR: OSPF detected duplicate router-id [IP_address] from [IP_address] on interface

Explanation OSPF has received a hello packet from a neighbor that has the same router ID as this routing process. A full adjacency cannot be established.

Recommended Action The OSPF router ID should be unique. Change the router ID of the neighbor.

Error Message

%OSPF-4-ERRRCV: Received invalid packet: [chars] from [IP_address], [chars]

Explanation An invalid OSPF packet was received. Details are included in the error message. The cause might be a misconfigured OSPF or an internal error involving the sender.

Recommended Action Check the OSPF configuration of the receiver and the sender for inconsistency.

Error Message

%OSPF-3-INIT_IDB: OSPF is enabled on [chars] during idb initialization

Explanation OSPF has been enabled on the interface specified in the error message. This condition can be caused by an OIR operation or a reload of the microcode on the route processor. If neither an OIR operation nor a microcode reload has occurred, this condition indicates an internal error.

Recommended Action Normally, no action is required. If this message recurs, copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%OSPF-3-INTERNALERR: Internal error: [chars]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%OSPF-3-NOBACKBONE: Flagged as being an ABR without a backbone area

Explanation The router was flagged as an ABR, but there is no backbone area in the router.

Recommended Action Restart the OSPF process.

Error Message

%OSPF-3-NOCONNDB: No database entry for connected address [IP_address]

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 **clear ip route** command.

Error Message

%OSPF-3-NOLSA: Failed to find this routers LSA in [chars]

Explanation The router is not able to find its own router link-state advertisement. This error can occur occasionally and will self-correct. However, if this message recurs, restart the OSPF process.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%OSPF-4-NONEIGHBOR: Received [chars] from unknown neighbor [IP_address]

Explanation An 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 this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%OSPF-4-NORTRID: OSPF process [dec] cannot start. There must be at least one "up" IP interface, for OSPF to use as router ID
```

Explanation OSPF failed while attempting to allocate a router ID from the IP address of one of its interfaces.

Recommended Action Ensure 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 one requires a unique router ID. You must have enough interfaces that are up so that each of them can obtain a router ID.

Error Message

```
%OSPF-3-NOSELF: if [chars] if_state [dec]
```

Explanation An internal error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%OSPF-6-NOSRCPDB: ex_route_callback(): Can't find the src protocol to redistribute net [IP_address][IP_netmask]
```

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-4-NOTREDIST4: Database scanner: external LSA [IP_address][IP_netmask] is lost, reinstalls
```

Explanation The software has detected an unexpected condition. The router will take corrective action and continue.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%OSPF-4-NOTREDIST5: db_free: external LSA [IP_address][IP_netmask]
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%OSPF-3-RDB_NO_LSA: lsid [IP_address] adv [IP_address] type [dec] gateway  
[IP_address] metric [dec] network [IP_address] mask [IP_address] protocol [hex]  
attr [hex] net-metric [dec]
```

Explanation OSPF has found an inconsistency between its database and the IP routing table.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%OSPF-3-RECONF_VL: OSPF process [dec] is changing router-id. Reconfigure virtual  
link neighbors with our new router-id
```

Explanation The OSPF process is being reset, and it will select a new router ID. This process will bring down all virtual links. Virtual-link configuration must be changed on all virtual-link neighbors for the links to work again.

Recommended Action Change virtual-link configuration on all the virtual-link neighbors to reflect the new route ID.

Error Message

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

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%OSPF-4-VIRTUAL_IN_NON_BACKBONE: Virtual link information found in non-backbone area: [chars]
```

Explanation An internal error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%OSPF-6-ZERO_BANDWIDTH: interface [chars] has zero bandwidth
```

Explanation The interface has reported its bandwidth as zero.

Recommended Action No action is required.

PA Messages

The following are port adapter (PA) error messages.

Error Message

```
%PA-2-BADDAT: PA interface data incorrect, [hex]
```

Explanation Incorrect port adapter interface data has been found.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PA-2-BADIDB: PA interface idb incorrect, [hex]
```

Explanation The control block data structure of the port adapter system indicates a zero interface descriptor block.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PA-2-BADINTERFACE: Out of range PCI Port Adaptor interface, [dec] on bay [dec]
```

Explanation The software has specified an out-of-range port adapter interface.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PA-2-BADPA: PA interface pa incorrect, [hex]
```

Explanation An incorrect port adapter interface has been specified.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PA-2-BADPA2: PA null adapter, [hex]
```

Explanation A null port adapter interface has been specified.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PA-2-BADPABAY: Out of range PCI Port Adaptor bay [dec]
```

Explanation The software has specified an out-of-range port adapter bay.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PA-2-BADPASCB: PA interface pascb incorrect, [hex]
```

Explanation The port adapter system control block data structure was incorrectly set in the command data structure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PA-2-BADPINST: PA interface port_inst incorrect, [hex]

Explanation An attempt to access internal data pertaining to the port instance has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PA-2-BADVCONT: PA interface vcont incorrect, [hex]

Explanation An incorrect VC interface has been specified.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PA-3-BRINGUPFAIL: port adapter in bay [[dec]] failed to reset.

Explanation An attempt to reset and initialize the port adapter has timed out.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%PA-3-CONFIG: Recommended port adapter configuration exceeded

Explanation The total bandwidth of high- and medium-bandwidth port adapters has exceeded the rated capacity of this system.

Recommended Action Refer to the configuration guidelines for the maximum allowed high- and medium-bandwidth port adapters for the system.

Error Message

%PA-3-DEACTIVATED: port adapter in bay [[dec]] powered off.

Explanation The port adapter is being powered off.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%PA-2-ILLEGALPA: Illegal Port Adaptor type [dec] in bay [dec] of [chars].

Explanation The port adapter is not supported by the controller into which it is plugged.

Recommended Action Remove the port adapter and return the controller to its original configuration.

Error Message

%PA-2-INCORRECTBRIDGEREG: Bad default register([hex]) setting([hex]) in PA bridge

Explanation The software is unable to configure certain settings for the port adapter PCI bridge in the specified bay.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PA-3-NOTSUPPORTED: PA in slot[dec] ([chars]) is not supported on this [chars]

Explanation The port adapter in the specified slot is not supported on this chassis or CPU card.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PA-2-PABRIDGE: Failed to config bridge for PA [dec]

Explanation The system side PCI bridge for this port adapter has failed initialization. The port adapter will therefore not be operational.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PA-3-PACREATE: Unable to create driver for Port Adaptor type [dec] in bay [dec]

Explanation A possible memory shortage or port adapter hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PA-2-PARECUR: Recursive loop while getting the daughtercard info for PA type [dec]

Explanation While retrieving the daughter card information for the chassis MIB, the platform SNMP code has gone into an infinite loop.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PA-4-PCIVALID: PCI activation failed, bay [dec], [hex]

Explanation The system has received an invalid PCI signal from the port adapter. This is probably due to a hardware failure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PA-2-QOVERFLOW: PA queue overflow, cmd [hex]

Explanation The port adapter queue has overflowed and the programming has been lost.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PA-3-REVNOTSUPPORTED: PA in slot[dec] ([chars]) requires base h/w revision of ([dec].[dec]) for this [chars]

Explanation A newer hardware revision of the port adapter is required for functional operation on this chassis.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PA-0-RUPTCONFLICT: Conflict detected when trying to install [chars] interrupt handler, bay [dec].

Explanation An attempt was made to register an interrupt handler either for a nonexistent port adapter or for the wrong interrupt priority level.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PA-2-UNDEFIO: Unsupported I/O Controller (type [dec]) in I/O Bay. The I/O Controller network interfaces will be unavailable.

Explanation The software does not have a driver for the specified port adapter type located in the I/O bay.

Recommended Action Ensure that the image you are running supports this card. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PA-2-UNDEFPA: Undefined Port Adaptor type [dec] in bay [dec]

Explanation A card in the specified bay was not properly recognized by the Cisco IOS software.

Recommended Action Ensure that the Cisco IOS software image that the system is running supports the specified card. On the platforms that have both a boot image, which is loaded first to recognize the hardware, and a main image, which is loaded after the boot image, ensure that both images support the specified card. Check the hardware and software compatibility matrix. If the Cisco IOS software image meets the hardware requirements, attempt to reseat the card. If this message recurs after the card has been reseated, replace the card.

Error Message

%PA-2-UNDEFPA BRIDGE: Unsupported Port Adaptor Bridge [hex] in bay [dec]

Explanation The PCI bridge on the midplane is broken.

Recommended Action Ensure that your hardware configuration is supported by your Cisco IOS software. Try to reseat the port adapters. If the problem persists, replace the midplane.

PAD Messages

The following are X.25 packet assembler/disassembler (PAD) error messages.

Error Message

```
%PAD-3-GETLINE: Tty[t-line], bad return code [dec] from x3_getline()
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PAD-2-INTR: [chars] called at interrupt level [hex]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PAD-2-PUTSETUP: Tty[t-line], buffer already setup
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

PAMMBOX Messages

The following are platform-independent PAM mailbox serial interface error messages.

Error Message

```
%PAMMBOX-3-BADCONFIG: Bad mailbox config data [hex], [hex]
```

Explanation An error has been found in the mailbox configuration data.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PAMMBOX-3-BADRXFRMHDR: [dec] [dec] [dec] [dec] [hex] [hex] [hex]
```

Explanation A received PAM mailbox message frame contains an invalid header.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PAMMBOX-3-BADSTATUS: Bad mailbox status data [hex], [hex]
```

Explanation An error has been found in the PAM mailbox status data.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PAMMBOX-3-INITERROR: Initialization Error: [chars]
```

Explanation An error has occurred during the subsystem initialization.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PAMMBOX-3-PLATADDSLOT: Platform add slot error [dec], [dec]
```

Explanation The platform-dependent add-slot routine has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PAMMBOX-3-PLATDELETESLOT: Platform delete slot error [dec], [dec]
```

Explanation The platform-dependent delete-slot routine has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PAMMBOX-3-RXBADSTATE: RX mailbox in illegal state [dec] [dec]

Explanation The Rx mailbox is in a not-owned state, but it has interrupted as if it were in an owned state.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PAMMBOX-3-RXNOIDB: RX a message but no NRP IDB for slot [dec] subslot[dec]

Explanation A message has been received, but no IDB exists for the specified slot and subslot.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PAMMBOX-3-RXQWAKEUPREASON: Unknown wakeup reasons: [dec] [dec]

Explanation The Rx packet queue process has woken up for an unknown reason.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PAMMBOX-3-TXBADSTATE: TX mailbox in illegal state [dec] [dec] [dec]

Explanation The Tx mailbox is owned and empty, but the output queue is not empty.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PAMMBOX-3-TXOUTERR: Transmit Message Output Error: [dec] [dec] [dec] [dec]

Explanation Sanity checks have failed on a transmit message.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PAMMBOX-3-TXPAKERR: Transmit Message No Packet
```

Explanation The Tx message cannot obtain a packet.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PAMMBOX-3-TXRXBADINITSTATE: TX/RX mailbox owned in illegal initial state [dec] [dec]
```

Explanation The Tx mailbox, the Rx mailbox, or both are in an illegal initial ownership state.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PAMMBOX-3-UNEXPECTEDINT: Unexpected PAM Mailbox Interrupt: [chars]
```

Explanation Sanity checks have failed on a transmit message.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

PARSER Messages

The following are parser error messages.

Error Message

```
%PARSER-4-BADCFG: Unexpected end of configuration file.\n
```

Explanation A configuration has been read from the TFTP server or NVRAM, and the end of the file has been encountered before the end statement. The configuration may be corrupted or incomplete. What was read is in effect.

Recommended Action Ensure that the configuration is correct. After the configuration is verified, enter either the **copy running-config startup-config** command to write the good configuration to NVRAM, or the **copy running-config tftp** command to write to a network TFTP server.

Error Message

%PARSER-4-BADRANGE: Bad range <[dec]-[dec]> for command '[chars]'

Explanation A software or hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PARSER-3-BADSUBCMD: Unrecognized subcommand [dec] in [chars] command '[chars]'

Explanation The parser has failed an internal software check.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PARSER-3-CREATEINT: Can't create any more subinterfaces

Explanation The parser has failed an internal software check.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PARSER-2-INTDISABLE: Interrupts disabled in mode [chars] by command '[chars]'

Explanation A hardware or software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PARSER-4-INVLDLINE: Invalid line in NV generation: [t-line]\n

Explanation The parser has failed an internal software check.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PARSER-4-INVLDNVGEN: Invalid function called in NVGEN of '[chars]'

Explanation An internal error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the **show version** command to gather and copy the displayed information. Contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%PARSER-4-LINKPOINT: Parser reached link_point

Explanation The parser has failed an internal software check.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PARSER-4-MULFUNCS: unknown test in test_multiple_funcs '[char]'

Explanation The parser has failed an internal software check.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PARSER-4-MULTIPLEIFS: interface_action: multiple ifs present when unit_only set

Explanation The parser has failed an internal software check.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PARSER-3-NOLINK: no link_point([dec]) in the [chars] [chars] command chain

Explanation The parser has failed an internal software check.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PARSER-4-NUMHELP: general_number_short_help: Invalid [chars] number flag
```

Explanation The parser has failed an internal software check.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PARSER-4-NVGEN: nvgen_token called but csb->nvgen not set
```

Explanation The parser has failed an internal software check.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PARSER-4-PROTOADDR: protoaddr_action: Unknown link_type [dec]
```

Explanation The parser has failed an internal software check.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

PERUSER Messages

The following are PPP per-user configuration error messages.

Error Message

```
%PERUSER-3-ISDNINTF: [chars] [chars]: Can not apply configuration to ISDN channel:
"[chars]"
```

Explanation The configuration cannot be applied to individual ISDN channels.

Recommended Action Virtual profiles and virtual-access interfaces are required in order to apply the configuration to ISDN. Refer to the *Cisco IOS Dial Technologies Configuration Guide* for more information on virtual profiles.

PF Messages

The following are protocol filtering error messages.

Error Message

`%PF-4-MEM_UNAVAIL: Memory was not available to perform the protocol filtering action`

Explanation Protocol filtering is unable to operate because of a lack of memory.

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

Error Message

`%PF-4-PROC_START_ERR: Protocol filtering unable to start`

Explanation The protocol-filtering process could not be created. The reason for this error is unknown.

Recommended Action This condition might be a transient condition. Restart protocol filtering. If this message recurs, reload the device.

Error Message

`%PF-5-TRUNKPFOFF: Protocol filtering disabled on interface [chars] because it is a trunk`

Explanation Protocol filtering does not operate on trunks. The protocol-filtering configuration will stay with the trunk port, but it has no effect and will not appear when all nondefault protocol filters are displayed.

Recommended Action No action is required.

Error Message

`%PF-4-UNKN_ERR: An unknown operational error occurred`

Explanation Protocol filtering is unable to operate because an internal operation generated an unexpected error.

Recommended Action Reload the device.

PGM Messages

The following are Pragmatic General Multicast (PGM) error messages.

Error Message

```
%PGM-6-ADDR_ERR: Invalid [chars] address [IP_address] in [chars]
```

Explanation A packet with an invalid address has been received.

Recommended Action No action is required.

Error Message

```
%PGM-3-EXP_TSI_SQN_ERR: Expiring TSI [chars] has retransmit state
```

Explanation An expiring PGM TSI has an unexpired retransmit state. This condition can occur only because of an internal error or because of memory that cannot be freed.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PGM-3-PAK_ALLOC_ERR: Failed to allocate buffer for [chars]
```

Explanation Not enough memory is available to allocate packet buffers.

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

Error Message

```
%PGM-6-PAK_IIF_FIXUP: Pak for [IP_address] received on [IP_address], fixed input interface
```

Explanation A PGM packet was received on an interface other than the one to which it was addressed.

Recommended Action No action is required.

Error Message

```
%PGM-6-PAK_MALFORMED_ERR: Malformed packet: [chars]
```

Explanation A PGM packet did not pass the internal sanity check.

Recommended Action No action is required.

Error Message

%PGM-6-QUEUE_FULL: Serviced full queue of PGM packets.

Explanation The PGM process is busy, either because of an excessive retransmit state or because of excessive traffic.

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

Error Message

%PGM-3-RTX_STATE_ALLOC_ERR: Failed to allocate [chars] state

Explanation Insufficient memory is available to allocate the specified retransmit state.

Recommended Action Manually clear all retransmit states by entering the **clear ip pgm router EXEC** command or deconfigure and reconfigure the PGM. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PGM-3-RTX_STATE_FREE_ERR: Failed to free [chars] state

Explanation Insufficient memory is available to free the specified retransmit state.

Recommended Action Manually clear all retransmit states by entering the **clear ip pgm router EXEC** command or deconfigure and reconfigure the PGM. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PGM-6-TSI_GROUP_CHANGE: TSI group changed from [IP_address] to [IP_address]

Explanation A PGM SPM has advertised a new group for the TSI.

Recommended Action No action is required.

Error Message

%PGM-6-TSI_SOURCE_CHANGE: TSI source changed from [IP_address] to [IP_address]

Explanation A PGM SPM has advertised a new source for the TSI.

Recommended Action No action is required.

PGMHOST Messages

The following are Pragmatic General Multicast (PGM) host module error messages.

Error Message

```
%PGMHOST-6-INPUT_PACKET_ERR: Matched TSI but failed to match dport; expected [dec]
actual [dec]
```

Explanation An incorrectly structured packet has been received from the network.

Recommended Action Investigate the problem and fix the other implementation of PGM.

PIM Messages

The following are Protocol Independent Multicast (PIM) error messages.

Error Message

```
%PIM-4-DEPRECATED_HELLO_TLV: Deprecated PIM Hello Option TLV [dec] ([chars]) from
[IP_address] ([chars])
```

Explanation A PIM neighbor is running old software that uses obsolete or inactive Hello Option TLVs. Unless the router is upgraded, DR priority and bidirectional groups may not function properly.

Recommended Action No action is required.

Error Message

```
%PIM-6-INVALID_RP_JOIN: Received (*, [IP_address]) Join from [IP_address] for
invalid RP [IP_address]
```

Explanation A downstream PIM router has sent a join message for the shared tree, which this router does not want to accept. This behavior indicates that this router will let only downstream routers join to a specific rendezvous point.

Recommended Action Configure all downstream leaf routers (first-hop routers to multicast sources) to join to the RP that is allowed by upstream routers toward the validated rendezvous point.

Error Message

```
%PIM-1-INVALID_RP_REG: Received Register from [IP_address] for [IP_address], not
willing to be RP
```

Explanation A PIM router has received a register message from another PIM router that is configured as the rendezvous point. If the router is not configured for another rendezvous point, it will not accept the register message.

Recommended Action Configure all leaf routers (first-hop routers to multicast sources) with the IP address of the valid rendezvous point.

Error Message

%PIM-1-INVALID_SRC_REG: Received Register from [IP_address] for ([IP_address], [IP_address]), not willing to be RP

Explanation A PIM router that is configured as a rendezvous point has received a register message from another PIM router, but the source of the multicast data is disallowed in this RP.

Recommended Action No action is required.

Error Message

%PIM-6-REG_ENCAP_INVALID: Bad register from [IP_address] for ([IP_address], [IP_address]); additional info = [hex] [hex] [hex] [hex] [hex] [hex] [hex] [hex]

Explanation A PIM router that is configured as a rendezvous point or configured with NAT has received a PIM register packet from another PIM router. The data that is encapsulated in this packet is invalid.

Recommended Action No action is required.

Error Message

%PIM-6-SA_ENCAP_INVALID: Bad SA from RP [IP_address] for ([IP_address], [IP_address]); additional info = [hex] [hex] [hex] [hex] [hex] [hex] [hex] [hex]

Explanation A PIM router that is configured as an MSDP peer has received an SA with encapsulated data. The data that is encapsulated in this packet is invalid.

Recommended Action No action is required.

Error Message

%PIM-1-SR_INTERVAL_SETTING_ERR: Incompatible SR interval from [IP_address] on [chars] ([dec] != [dec])

Explanation A state-refresh-capable PIM neighbor on this interface has a different, incompatible setting for the state-refresh origination interval from other routers that are connected to the LAN.

Recommended Action Configure all PIM routers connected to this LAN to use the same state-refresh origination interval for their interfaces on the LAN.

PLATFORM Messages

The following are platform-specific error messages.

Error Message

%PLATFORM-4-COOKIE: Corrupt or missing MAC address cookie using random base [enet]

Explanation The contents of the MAC address EEPROM is invalid. The system is providing a random MAC address.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PLATFORM-3-FATALPXF: Fatal PXF interrupt, reg=[hex], mask=[hex], config=[hex] - [chars]

Explanation The PXF has issued a fatal interrupt. This error may indicate a hardware or a software problem.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PLATFORM-4-NOCPUVER: Invalid CPU ID, assuming revision 1

Explanation The CPU ID could not be read from the EEPROM. This error is probably caused by a hardware failure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PLATFORM-3-NOMAC: Can't allocate MAC address for interface [int]/[int]

Explanation The MAC address allocation has failed because of an incorrect slot and port combination that exceeds the maximum available hardware.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PLATFORM-3-PACONFIG: Exceeds [dec] [chars]

Explanation The total bandwidth of high- and medium-bandwidth port adapters has exceeded the rated capacity of this system.

Recommended Action Refer to the configuration guidelines for the maximum allowed high- and medium-bandwidth port adapters for the system.

Error Message

%PLATFORM-4-RECALLED_NPE: Old version NPE-175/225 with Rev = [hex] system controller. Contact upgrades-info@cisco.com for replacement

Explanation The NPE board has been recalled because of an error in the system controller chip.

Recommended Action Contact your Cisco technical support representative to replace the NPE-175/225 board.

PM Messages

The following are Port Manager error messages.

Error Message

```
%PM-4-BAD_APP_ID: an invalid application id ([dec]) was detected
```

Explanation An invalid request has been detected by the Port Manager.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%PM-4-BAD_APP_REQ: an invalid [chars] request by the '[chars]' application was detected
```

Explanation An invalid request has been detected by the Port Manager.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%PM-4-BAD_CARD_COOKIE: an invalid card cookie was detected
```

Explanation An invalid request has been detected by the Port Manager.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%PM-4-BAD_CARD_SLOT: an invalid card slot ([dec]) was detected
```

Explanation An invalid request has been detected by the Port Manager.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%PM-4-BAD_COOKIE: [chars] was detected
```

Explanation An invalid request has been detected by the Port Manager.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%PM-4-BAD_PORT_COOKIE: an invalid port cookie was detected
```

Explanation An invalid request has been detected by the Port Manager.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%PM-4-BAD_PORT_NUMBER: an invalid port number ([dec]) was detected
```

Explanation An invalid request has been detected by the Port Manager.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%PM-4-BAD_VLAN_COOKIE: an invalid vlan cookie was detected
```

Explanation An invalid request has been detected by the Port Manager.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%PM-4-BAD_VLAN_ID: an invalid vlan id ([dec]) was detected
```

Explanation An invalid request has been detected by the Port Manager.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%PM-4-ERR_DISABLE: [chars] error detected on [chars], putting [chars] in  
err-disable state
```

Explanation The interface has been put into the “err-disable” state because the interface has detected a misconfiguration or misbehavior. This action is a defensive measure. A recovery will be attempted after the configured retry time. The default retry time is five minutes.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%PM-4-ERR_RECOVER: Attempting to recover from [chars] err-disable state on [chars]
```

Explanation An attempt is being made to bring the interface back after taking it down to the “err-disable” state.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%PM-2-NOMEM: Not enough memory available for [chars]
```

Explanation The Port Manager subsystem could not obtain sufficient memory.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%PM-4-TOO_MANY_APP: application '[chars]' exceeded registration limit
```

Explanation An invalid request has been detected by the Port Manager.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

PM_MODEM_HIST Messages

The following are modem history and tracing error messages.

Error Message

```
%PM_MODEM_HIST-7-CSM_IC_CALLED_NUM:
[chars]: ISDN incoming called number: [chars]
```

Explanation This tracing message indicates the number of the ISDN line that is receiving a call.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%PM_MODEM_HIST-7-CSM_IC_CALLING_NUM:
[chars]: ISDN incoming caller number: [chars]
```

Explanation This tracing message indicates the number of an incoming ISDN caller.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%PM_MODEM_HIST-7-CSM_OC_CALLED_NUM:
[chars]: ISDN outgoing called number: [chars]
```

Explanation This tracing message indicates a dialed ISDN number.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%PM_MODEM_HIST-7-MODEM_DYNAMIC_EVT:
[chars]: [chars]
[chars]
```

Explanation This tracing message indicates a dynamic event reported by the specified modem.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%PM_MODEM_HIST-7-MODEM_END_CONN_EVT:  
[chars]: [chars]  
[chars]
```

Explanation This tracing message indicates an end-of-connection event from the specified modem.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%PM_MODEM_HIST-7-MODEM_ROS_EVT:  
[chars]: [chars]  
[chars]
```

Explanation This tracing message indicates a link rate event reported by the specified modem.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%PM_MODEM_HIST-7-MODEM_STATE_EVT:  
[chars]: [chars]  
[chars] State: [chars]
```

Explanation This tracing message indicates a state event reported by the specified modem.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%PM_MODEM_HIST-7-MODEM_STATIC_EVT:  
[chars]: [chars]  
[chars]
```

Explanation This tracing message indicates a static event reported by the specified modem.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%PM_MODEM_HIST-7-PORT_STATE_REACHED_NTF_EVT:  
[chars]: [chars] [chars]
```

Explanation This tracing message indicates a link rate event reported by the specified modem.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%PM_MODEM_HIST-7-TRACE_HDR:
```

```
Modem [chars] Events Log:
```

Explanation This is the initial message for the trace of the specified modem. The stored trace messages of the modem will follow.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%PM_MODEM_HIST-7-UNKNOWN_EVENT:
```

```
[chars]: Error in events log
```

Explanation This tracing message indicates a formatting error in the modem event history. One or more events may be missing from the trace.

Recommended Action This is a debug message only. No action is required.

Error Message

```
%PM_MODEM_HIST-7-UNKNOWN_FRAME:
```

```
[chars]: Error in events log
```

Explanation This tracing message indicates a formatting error in the modem event history. One or more events may be missing from the trace.

Recommended Action This is a debug message only. No action is required.

PM_MODEM_MAINT Messages

The following are modem maintenance error messages.

Error Message

```
%PM_MODEM_MAINT-4-B2BABORT: Modems ([chars]) and ([chars]) back-to-back test:
aborted
```

Explanation This tracing message indicates that a back-to-back test has failed for the two specified MICA modems.

Recommended Action Perform more back-to-back tests by pairing the failed modems with other modems to determine which modem has failed. Check the failed modems again after performing a power cycle. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PM_MODEM_MAINT-5-B2BCONNECT: Modems ([chars]) and ([chars]) connected in back-to-back test: [chars]

Explanation A back-to-back test connection has been made between the selected modems. The test is in progress.

Recommended Action No action is required.

Error Message

%PM_MODEM_MAINT-5-B2BINIT: Auto Back-to-Back test initiated by [chars]

Explanation An automatic back-to-back test has been initiated by the specified MICA modem.

Recommended Action This is a debug message only. No action is required.

Error Message

%PM_MODEM_MAINT-5-B2BMODEMS: Modems ([chars]) and ([chars]) completed back-to-back test: success/packets = [dec]/[dec]

Explanation The reported modems have passed the back-to-back test with no errors.

Recommended Action No action is required.

Error Message

%PM_MODEM_MAINT-1-BADEVENT: Invalid modem management [chars] event [hex] for modem([chars])

Explanation The modem management facility has received an unrecognized event.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PM_MODEM_MAINT-1-BADMODEM: Modem ([chars]) failed [chars]

Explanation A software or hardware problem has been detected on a modem. The specific modem and reason are provided in the message.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PM_MODEM_MAINT-4-BADMODEMS: Modems ([chars]) and ([chars]) failed back-to-back test: [chars]
```

Explanation The two modems that are specified in the message have failed a back-to-back test. At least one of the modems has failed.

Recommended Action Perform more back-to-back tests by pairing the failed modems with other modems to determine which modem has failed. Check the failed modems again after performing a power cycle. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PM_MODEM_MAINT-1-INITFAIL: Initialization failed.
```

Explanation The modem maintenance facility initialization has failed.

Recommended Action Disable autotest and power-on test and avoid performing a manual back-to-back test. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PM_MODEM_MAINT-5-MODEM_OK: Modem ([chars]) passed the test
```

Explanation The tests on the specified modem were successful.

Recommended Action No action is required.

PNNI Messages

The following are Private Network-Network Interface (PNNI) error messages.

Error Message

```
%PNNI-4-ADDRESS_EXIST: Address derived from the switch's prefix by soft PVC manager [chars] clashes with existing address in prefix table
```

Explanation A PVC port address assignment has collided with an existing address. An address that would have been assigned by this switch has already been assigned by another.

Recommended Action If it is possible, assign a new MAC address to the peer system that caused the assignment collision.

Error Message

%PNNI-4-ATM_SYS_ERROR: Error: [chars]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PNNI-4-BADPACKET: Invalid [chars] pkt: [chars] [dec] [dec]

Explanation An invalid packet has been received from a network peer.

Recommended Action Check the originating device for a cause of the corrupted packets.

Error Message

%PNNI-4-BADROUTEREQ: Bad Request from Signaling [hex]

Explanation A source routing request by another network host has been corrupted.

Recommended Action Check the originating system for a cause of the problem.

Error Message

%PNNI-4-CONFIG_ERROR: Configuration Error: [chars]

Explanation A configuration error has occurred in the PNNI subsystem. The message will display more specific information about the cause of problem.

Recommended Action Change the configuration to correct the error.

Error Message

%PNNI-7-DEBUG: [chars]

Explanation This is an informational message only. It is used by Cisco for testing.

Recommended Action No action is required. Informational messages can be disabled by changing the logging level.

Error Message

%PNNI-4-DUPLICATE_NODE_ID: [chars] [chars] for node [dec] [chars]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PNNI-6-INFO: [chars]

Explanation This is an informational message only.

Recommended Action No action is required. Informational messages can be disabled by changing the logging level.

Error Message

%PNNI-3-INTERNAL_ERROR: [chars][chars] [hex]

Explanation An internal software error has occurred. The message contains more information that can be used to identify the problem.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PNNI-3-INVALID_MEM: Bad address of [chars] [hex], please collect "show atm pnni trace error"

Explanation An internal software error has occurred.

Recommended Action Enter the **show atm pnni trace error** command to collect additional information that might help solve the problem. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PNNI-2-NO_INTERNAL_NUMBER: Empty Internal Number Stack: [chars]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%PNNI-2-SPF_ERROR: Tent List Overflow in [chars]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

PORT Messages

The following are Port Management error messages.

Error Message

%PORT-6-NULL_OBJ: Port object [chars] is unavailable.

Explanation Information about the specified port could not be retrieved. The port may not exist.

Recommended Action No action is required.

Error Message

%PORT-6-PORT_RECOVERY: [chars] [chars]

Explanation Recovery has been triggered, and configured action will take place on the port.

Recommended Action No action is required.

Error Message

%PORT-6-SESSION_RECOVERY: [chars] [chars] [dec]

Explanation The session recovery has an invalid cause code.

Recommended Action No action is required.

Error Message

%PORT-6-SM_PORT_CLEARED: [chars]

Explanation The ports have been be reset, and any active calls on these ports will be terminated.

Recommended Action No action is required.

POSDW Messages

The following are Packet over SONET double-wide PCI port adapter driver error messages.

Error Message

%POSDW-1-DISCOVER: Only found [dec] interfaces on bay [dec], shutting down bay

Explanation The Packet over SONET double-wide PCI port adapter driver hardware has failed. An incorrect number of interfaces has been discovered.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%POSDW-1-INITFAIL: [chars] init timed out

Explanation The port adapter of the Packet over SONET double-wide PCI port adapter driver has failed to complete its hardware initialization.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%POSDW-3-NOTPOSDW: Device reported [hex]

Explanation The Packet over SONET double-wide PCI port adapter driver hardware has failed. A non-Packet over SONET double-wide PCI port adapter driver device pointed at the software for the Packet over SONET double-wide PCI port adapter driver.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%POSDW-3-OWNERR: [chars] packet buffer, pak=[hex]

Explanation A software or hardware error has occurred. The driver of the Packet over SONET double-wide PCI port adapter driver has detected that the transmit ring is in an inconsistent and unrecoverable state.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%POSDW-3-UNSUPPORTED: [chars]\n

Explanation The Packet over SONET double-wide PCI port adapter driver hardware is not supported on this platform.

Recommended Action Upgrade your system.

POSLC Messages

The following are Packet over SONET line card error messages.

Error Message

```
%POSLC-3-4302: Runaway Skystone 4302 framer [dec] Tx [chars] counter, byte=[dec],  
pkt=[dec].
```

Explanation An internal hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%POSLC-3-APS: APS([dec]) [chars]
```

Explanation The RP dead-man timer has expired on the LC, and the LC is sending LAIS to the remote end.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%POSLC-3-BMAENG: [chars] POS, [chars] [chars][chars]. (src=[hex], det1=[hex],  
det2=[hex])
```

Explanation A Packet over SONET BMA engine hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Run diagnostics on the line card in the specified slot. If diagnostics pass, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%POSLC-3-BMAPAR: [chars] POS, [chars]. BMA_DATA[3:0]=[hex]. (src=[hex],  
det1=[hex], det2=[hex])
```

Explanation A parity error has occurred on the POS BMA engine.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Run diagnostics on the line card in the specified slot. If diagnostics pass, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%POSLC-1-INITFAIL: POSLC([dec]/[dec]), initialization timeout failure

Explanation The LC Packet over SONET ASIC and framer initialization has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%POSLC-3-LINKBADEVT: Unexpected event woke up LC POS link process.

Explanation The LC Packet over SONET link report process has received an unexpected event.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show subsys** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show subsys** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%POSLC-3-LINKNOPRC: POSLC, lcpos_add_process: Unable to create lcpos_link_report process

Explanation An LC Packet over SONET link report process could not be created.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show subsys** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show subsys** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%POSLC-3-LINKPROC: POSLC, lcpos_link_report process: Could not get argument

Explanation An LC Packet over SONET link report process has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show subsys** and **show memory summary** commands to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show subsys** and **show memory summary** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%POSLC-3-POSENG: [chars] POS, [chars]. [chars], port [dec]. (src=[hex], det1=[hex], det2=[hex])

Explanation A Packet over SONET engine hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Run diagnostics on the line card in the specified slot. If diagnostics pass, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%POSLC-3-RXPOSTO: POSLC([dec]/[dec]), RX POS engine shutdown failed

Explanation The software is trying to shut down the RX Packet over SONET engine. Because the Packet over SONET engine would not shut down, the software has timed out.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Run diagnostics on the line card in the specified slot. If diagnostics pass, issue the **execute-on slot show controller pos registers** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **execute-on slot show controller pos registers** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%POSLC-3-SOP: [chars] SOP. (source=[hex], halt_minor0=[hex])

Explanation A SOP hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Run diagnostics on the line card in the specified slot. If diagnostics pass, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%POSLC-3-SRAMPAR: [chars] POS, [chars]. [chars]=[hex][chars]. (src=[hex], det1=[hex], det2=[hex])

Explanation A parity error has occurred on the Packet over SONET ASIC SRAM.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Run diagnostics on the line card in the specified slot. If diagnostics pass, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%POSLC-3-TXPOSTO: POSLC([dec]/[dec]), TX POS engine shutdown failed
```

Explanation The software is trying to shut down the TX Packet over SONET engine. Because the Packet over SONET engine refuses to shut down, the software has timed out.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Run diagnostics on the line card in the specified slot. If diagnostics pass, issue the **execute-on slot show controller pos registers** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **execute-on slot show controller pos registers** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

POT1E1 Messages

The following are Versatile Interface Processor (VIP) multichannel port adapter error messages.

Error Message

```
%POT1E1-3-BADMSG: Received unexpected mailbox message (id = [dec])
```

Explanation The POT1E1 mailbox has received an unexpected message.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%POT1E1-1-CONFIGURE: Fail to configure [dec] interfaces on bay [dec], shutting down bay
```

Explanation The system cannot configure some interfaces on the card.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%POT1E1-1-DISCOVER: only found [dec] interfaces on bay [dec], shutting down bay
```

Explanation Either two types of interfaces were found or the POT1E1 hardware has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%POT1E1-1-DWNLDCKSM: Failed for bay [dec], sent = [hex], received = [hex]

Explanation The download of internal firmware to the POT1E1 failed to perform the checksum operation. This message usually indicates a hardware failure.

Recommended Action Perform a power cycle. If the problem persists, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%POT1E1-1-DWNLDFAIL: Download failed

Explanation A microcode download to the POT1E1 port adapter has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%POT1E1-3-ERROR: [chars]

Explanation A POT1E1 general error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%POT1E1-3-FWFATAL: Bay [dec]: firmware needs reset due to [chars]

Explanation POT1E1 has experienced firmware problems.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%POT1E1-1-INITFAIL: Slot [dec]: [chars]

Explanation The PRI port adapter has failed to complete hardware initialization.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%POT1E1-3-LOVEFAIL: [chars]: failed to send [chars] love letter
```

Explanation The POT1E1 has failed to send a message.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%POT1E1-3-MBOXRECV: Bay [dec]: fail receiving mbox reply [dec]
```

Explanation The POT1E1 mailbox has failed to receive a message.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%POT1E1-3-MBOXSEND: Bay [dec]: fail sending mbox msg [dec]
```

Explanation The POT1E1 mailbox has failed to send a message.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%POT1E1-3-MBOXSENDP: Bay [dec]: fail sending mbox msg [dec] for port [dec]
```

Explanation The POT1E1 mailbox has failed to send a specified port.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%POT1E1-3-MBXREAD: [chars] has stale msg - mbx0:[hex], mbx1:[hex], mbx2:[hex]
```

Explanation The POT1E1 has not responded to a message within a specified time.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%POT1E1-1-NOTCMPLT: Microcode download failed to complete

Explanation The POT1E1 hardware has failed. It could not download its operational microcode.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%POT1E1-3-NOTPLX: Device is not PLX 9060 - Device reported [hex]

Explanation The wrong device has been reported on the POT1E1.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%POT1E1-3-NOTPOT1E1: Device is not FREEDM - Device reported [hex]

Explanation The POT1E1 hardware has failed. A non-POT1E1 device pointed to the software for the POT1E1 serial.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%POT1E1-3-OWNERR: serial ([dec]), Buffer ownership error, pak=[hex]

Explanation An internal buffer ownership error has occurred on POT1E1.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%POT1E1-3-PANIC: Exception [dec], trace [dec]

Explanation The POT1E1 firmware has detected an illegal or unexpected CPU exception or condition. This may be caused by a software error or by a hardware failure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%POT1E1-2-POT1E1FWCRASHED: [chars]
```

Explanation The POT1E1 software has failed. This condition indicates a software failure.

Recommended Action Consider upgrading your system to the latest Cisco IOS software release in your release train to take advantage of recent fixes.

Error Message

```
%POT1E1-2-POT1E1FWCRASHEDINFO: [hex] [hex] [hex] [hex]
```

Explanation This message contains POT1E1 firmware crash information.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%POT1E1-2-POTBADCMD: bad POT1E1 command [dec]
```

Explanation The POT1E1 has received an unsupported command.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%POT1E1-1-STARTFAIL: [chars] channel not enabled
```

Explanation A software or hardware error has occurred. The POT1E1 serial interface is not responding to commands used to initialize the interface.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%POT1E1-1-STOPFAIL: [chars] channel not disabled
```

Explanation The PRI port adapter has failed to respond to a request to disable an interface.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%POT1E1-3-TOOSMALL: [chars] - packet was less than two bytes
```

Explanation A packet that is too small (less than 2 bytes) has been detected.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

POTS Messages

The following are POTS error messages.

Error Message

```
%POTS-4-FSM_ERROR: POTS finite state machine error [chars].
```

Explanation The POTS finite-state machine utility has encountered a problem.

Recommended Action If voice calls are unavailable, reload the router. If the problem persists, contact your service provider.

Error Message

```
%POTS-4-INVALID_EVENT: Port [int], Event [int] finite state machine error
```

Explanation The POTS finite-state machine event should not be received in the current state.

Recommended Action If voice calls are unavailable, reload the router. If the problem persists, contact your service provider.

Error Message

```
%POTS-4-INVALID_PORT: port [int], Ignoring activation, port number is invalid
```

Explanation The POTS driver request is ignored because the port does not exist.

Recommended Action If voice calls cannot be made, reload the router. If the problem persists, contact your service provider.

Error Message

```
%POTS-1-NOMEMORY: Unit [dec], no memory for [chars]
```

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

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

Error Message

%POTS-1-NULL_COMMON_PTR: null CSM/POTS Driver common pointer

Explanation The requested operation could not be accomplished because of a null pointer.

Recommended Action If voice calls are unavailable, reload the router. If the problem persists, contact your service provider.

Error Message

%POTS-4-PROCESS_EVENT_ERROR: POTS subsystem unexpected event [int].

Explanation The POTS subsystem process has received an invalid event.

Recommended Action If voice calls are unavailable, reload the router. If the problem persists, contact your service provider.

Error Message

%POTS-4-QUEUE_EMPTY: POTS empty process message [chars].

Explanation A POTS interrupt is unable to send a message to the POTS process.

Recommended Action If voice calls are unavailable, reload the router. If the problem persists, contact your service provider.

Error Message

%POTS-4-UNSUPPORTED_COUNTRY: CODEC driver doesn't support country [chars].

Explanation The codec driver cannot be configured for the specified country.

Recommended Action Contact your service provider.

Error Message

%POTS-4-UNSUPPORTED_OPTION: Interface does not support this option.

Explanation The interface cannot be configured for the specified option.

Recommended Action Contact your service provider.

Error Message

%POTS-4-UNSUPPORTED_RING_FREQ: CODEC driver only supports ring frequency values of 20, 25, and 50 Hz, not [dec]

Explanation The interface cannot be configured for the specified ring frequency.

Recommended Action Contact your service provider.

Error Message

`%POTS-4-UNSUPPORTED_RX_LOSS: CODEC driver only supports input loss values of -6 and 0, not [dec]`

Explanation The codec driver cannot be configured for the requested input loss.

Recommended Action Contact your service provider.

Error Message

`%POTS-4-UNSUPPORTED_SIGNAL_TYPE: Interface only supports loop start.`

Explanation The interface cannot be configured for the requested signal type.

Recommended Action Contact your service provider.

Error Message

`%POTS-4-UNSUPPORTED_TX_GAIN: CODEC driver only supports output gain values of 6 and 0, not [dec]`

Explanation The codec driver cannot be configured for the requested output gain.

Recommended Action Contact your service provider.

Error Message

`%POTS-4-VDEV_INIT_ERROR: Port [int] device initialization failure,`

Explanation The POTS subsystem initialization has failed.

Recommended Action Voice calls will be unavailable on this port. You must reload the router. If the problem persists, contact your service provider.

PPP Messages

The following are PPP error messages.

Error Message

`%PPP-3-AUXFAST: Fast-switching to aux port, packet dropped`

Explanation A packet was fast-switched to the auxiliary port. The auxiliary port should not be part of a dialer rotary-group, dialer pool, or multilink bundle that might be the destination of a fast-switched packet. The packet has been dropped.

Recommended Action Use the **no ip route-cache** command to disable fast switching on whatever configuration source provides the configuration for the link to this port.

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 Reconfigure one of the devices so that both devices have the same configuration.

Error Message

```
%PPP-4-NOAPPOINT: MLP Bundle [chars] not appointed
```

Explanation The multilink PPP bundle was not created for the session. This error probably occurred because of a lack of memory resources.

Recommended Action Record the output of the **show memory summary** command, and then analyze the output to find possible memory leaks.

Error Message

```
%PPP-4-NOCLEAR: MLP Bundle [chars] not cleared
```

Explanation A multilink PPP bundle was not cleared. This error probably occurred because of a lack of memory resources.

Recommended Action Record the output of the **show memory summary** command, and then analyze the output to find a possible memory leak.

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.

Error Message

```
%PPP-4-NOMAC: Lex ncp: no free Lex interface found with MAC address [enet]
```

Explanation A LAN Extender interface could not be found with the specified MAC address when a LAN Extender link was being brought up. This is a configuration error.

Recommended Action Refer to the documentation on configuring a LAN Extender interface.

Error Message

```
%PPP-4-NOREGISTER: NCP not registered, protocol = [dec]
```

Explanation A PPP NCP request has encountered an internal software error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PPP-4-NOSUCHREQ: Illegal PPP request type = [dec]
```

Explanation An illegal PPP request has been received. This error should never happen during normal operation.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

PQII Messages

The following are MPC860 quad integrated communications controller error messages.

Error Message

```
%PQII-1-BADHDXFSM: PQII([dec]/[dec]), Unexpected HDX state [dec], event [dec]
```

Explanation A bad event for half-duplex transmission or reception has been detected in the state machine.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PQII-1-CTSLOST: PQII([dec]/[dec]), Clear to Send Lost
```

Explanation The CTS input signal on a DTE serial interface became inactive while transmitting a frame. The problem was caused by a communication line failure or a cable disconnection.

Recommended Action Check the serial interface cable and communication equipment, such as the CSU/DSU.

Error Message

```
%PQII-1-INITFAIL: PQII([dec]/[dec]), SCC[dec] init failed
```

Explanation The software has failed to initialize or restart a 1T serial card.

Recommended Action Clear the serial interface. If the message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PQII-1-LINEFLAP: PQII([dec]/[dec]), Excessive modem control changes
```

Explanation The system has received too many modem control signal interrupts. Modem control signals are hardware handshake signals between DTE and DCE. The signals include either a DCD or a DSR, or both a DCD and a DSR.

Recommended Action Check the serial interface cable. The modem control signal interrupts can occur if the cable is disconnected or has come loose and is picking up noise. If the cable appears to be connected correctly, check the equipment connected to the cable.

Error Message

```
%PQII-1-NOMEMORY: Unit [dec], no memory for [chars]
```

Explanation The MPC8260/PowerQII CPU was unable to access the memory it needs to carry out its functions. Possible causes include the following:

- The network is large, requiring a lot of memory for routing tables and other things.
- The router configuration has many features enabled, each of which requires a certain amount of memory.
- A software error (memory leak) exists.

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

Error Message

```
%PQII-3-OWNERR: Unit [dec], buffer ownership error, pak = [hex]
```

Explanation An internal software error has occurred.

Recommended Action Call your Cisco technical support representative to obtain a software upgrade.

Error Message

%PQII-1-TOOBIG: PQII([dec]/[dec]), packet too big

Explanation A packet greater than the assigned MTU of this serial interface has been queued up for transmission.

Recommended Action The system should recover. No action is required. If the message recurs, it may indicate an error related to data traffic patterns. Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

%PQII-1-TOOSMALL: PQII([dec]/[dec]), packet was less than 2 bytes

Explanation A small packet (less than 2 bytes) was queued up for transmission. The interface cannot handle such small packets for transmission.

Recommended Action The system should recover. No action is required. If the message recurs, it may indicate a hardware error related to data traffic patterns. In this case, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PQII-1-UNDERFLO: PQII([dec]/[dec]), Transmit underflow

Explanation During transmission of a frame, the local buffer of the serial controller chip has received insufficient data because data could not be transferred to the chip fast enough to keep pace with its output rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

Recommended Action The system should recover. No action is required.

Error Message

%PQII-1-UNEXPECTED_INTERRUPT: PQII([dec]), Unexpected modem-signal interrupt

Explanation The software did not expect to see a modem control signal change on this type of WIC card interface.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PQII-3-UNKNOWN_SCCS: PQII, Incorrect SCC number

Explanation An internal software error has occurred.

Recommended Action Contact your technical support representative to obtain a software upgrade.

Error Message

%PQII-1-UNKNOWN_WIC: PQII([dec]), WIC card has an unknown ID of [hex]

Explanation The software does not recognize the type of WIC card that has been plugged into the port module.

Recommended Action Check the part number on the WIC card to verify that it is supported in the Cisco IOS software release that is operational on the router, or contact your Cisco technical support representative for assistance.

Error Message

%PQII-1-UNSUPPORTED_CONFIG: Slot [dec] has an unsupported combination of ISDN WAN interface cards

Explanation It is not possible to support the type of BRI card that is in slot 1 along with the incompatible type of BRI card that is in slot 0.

Recommended Action Remove one of the BRI cards from its slot.

Error Message

%PQII-1-WRONG_SLOT: PQII([dec]), BRI card in wrong slot(1)

Explanation The BRI card is not supported in WIC slot 0.

Recommended Action Power down, move the BRI card to the other WIC slot on the port module, and reboot.

PQUICC Messages

The following are MPC860 quad integrated communications controller error messages.

Error Message

%PQUICC-1-BADHDXFSM: PQUICC([dec]/[dec]), Unexpected HDX state [dec], event [dec]

Explanation A bad event was detected in the state machine for half-duplex transmission and reception.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PQUICC-5-COLL: Unit [dec], excessive collisions. Retry limit [dec] exceeded

Explanation An Ethernet cable is broken or is not terminated.

Recommended Action Check cables for proper connections and termination.

Error Message

%PQUICC-1-CTSLOST: PQUICC([dec]/[dec]), Clear to Send Lost

Explanation The CTS input signal on a DTE serial interface became inactive while the frame is being transmitted. This problem is a result of a communication line failure or cable disconnection.

Recommended Action Check the serial interface cable and the communication equipment, such as the CSU/DSU.

Error Message

%PQUICC-5-HBEAT: Unit [dec], heartbeat check failure

Explanation The Ethernet transceiver is malfunctioning.

Recommended Action Replace the Ethernet transceiver.

Error Message

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

Explanation A software or hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation The Ethernet cable might be too long, or there could be too many repeaters with the result that the delay from one end to the other is too long. The Ethernet cable might be overloaded with too many users.

Recommended Action Ensure that your Ethernet cable is the correct length and that you do not have too many repeaters in use. If these conditions are not the problem, try removing hosts from the Ethernet segment to reduce the load.

Error Message

%PQUICC-1-LINEFLAP: PQUICC([dec]/[dec]), Excessive modem control changes

Explanation The system has received too many modem control signal interrupts. Modem control signals are hardware handshake signals between DTE and DCE. The signals include either a DCD or a DSR, or both a DCD and a DSR.

Recommended Action Check the serial interface cable. The error can occur if the cable is disconnected or has come loose and is picking up noise. If the cable appears to be connected correctly, check the equipment connected to the cable.

Error Message

%PQUICC-1-LOSTCARR: Unit [dec], lost carrier. Transceiver problem?

Explanation The Ethernet 10BASE-T cable is unplugged.

Recommended Action Reconnect the 10BASE-T Ethernet cable.

Error Message

%PQUICC-1-NOMEMORY: Unit [dec], no memory for [chars]

Explanation The MPC860/PowerQUICC CPU was unable to access the memory it requires to carry out its functions. The following reasons are possible:

- The network is large, requiring a significant amount of memory for routing tables and other things.
- The router configuration has many features enabled, each of which requires a certain amount of memory.
- A software error (memory leak) exists.

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

Error Message

%PQUICC-3-OWNERR: Unit [dec], buffer ownership error, pak = [hex]

Explanation An internal software error has occurred.

Recommended Action Call your Cisco technical support representative to obtain a software upgrade.

Error Message

%PQUICC-1-TOOBIG: PQUICC([dec]/[dec]), packet too big

Explanation A packet greater than the assigned MTU of this serial interface was queued for transmission.

Recommended Action The system should recover. No action is required. If the message recurs, it may indicate an error related to data traffic patterns. If this is the case, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PQUICC-1-TOOSMALL: PQUICC([dec]/[dec]), packet was less than 2 bytes

Explanation A small packet (less than 2 bytes) was queued for transmission. The interface cannot handle such small packets for transmission.

Recommended Action The system should recover. No action is required. If the message recurs, it may indicate a hardware error related to data traffic patterns. If this is the case, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PQUICC-1-TXERR: [chars]: Fatal transmit error. Restarting...

Explanation A fatal transmit error has occurred on the interface, causing the line to be restarted.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, call your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation During transmission of a frame, the local buffer of the controller chip has received insufficient data because data could not be transferred to the chip fast enough to keep pace with its output rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

Recommended Action The system should recover. No action is required. If the problem recurs, it indicates a hardware error that might be related to data traffic patterns. If this is the case, copy the error message exactly as it appears on the console or in the system log, call your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PQUICC-1-UNEXPECTED_INTERRUPT: PQUICC([dec]), Unexpected modem-signal interrupt

Explanation The software has received a modem control signal change that was not expected on this type of WIC.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PQUICC-3-UNKNOWN_SCCS: PQUICC, Incorrect SCC number

Explanation An internal software error has occurred.

Recommended Action Contact your Cisco technical support representative to obtain a software upgrade.

Error Message

%PQUICC-1-UNKNOWN_WIC: PQUICC([dec]), WIC card has an unknown ID of [hex]

Explanation The software does not recognize the type of WIC that is plugged into the port module.

Recommended Action Check the part number on the WIC to verify that it is supported in the Cisco IOS software release that is operational on the router, or contact your Cisco technical support representative.

Error Message

%PQUICC-1-UNSUPPORTED_CONFIG: Slot [dec] has an unsupported combination of ISDN WAN interface cards

Explanation It is not possible to support the type of BRI card that is in slot 1 along with the incompatible type of BRI card that is in slot 0.

Recommended Action Remove one of the BRI cards from its slot.

Error Message

%PQUICC-1-WRONG_SLOT: PQUICC([dec]), BRI card in wrong slot(1)

Explanation The BRI card is not supported in WIC slot 0.

Recommended Action Power down, move the BRI card to the other WIC slot on the port module, and reboot.

PQUICC_ASYNC Messages

The following are asynchronous MPC860 quad integrated communications controller error messages.

Error Message

%PQUICC_ASYNC-3-CTSLOST: Unit [dec], Clear to Send Lost

Explanation The CTS input signal on a DTE serial interface became inactive during transmission of a frame. This problem is a result of a communication line failure or a cable disconnection.

Recommended Action Check the serial interface cable and the communication equipment, such as the CSU/DSU.

PQUICC_ASYNC_NOMEM Messages

The following are Integrated Port Module Asynchronous Driver error messages.

Error Message

```
%PQUICC_ASYNC_NOMEM-3-NOMEMORY: No memory for [chars] of unit [dec]
```

Explanation The router does not have enough memory to perform the requested function.

Recommended Action Consider adding more shared memory. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

PQUICC_ETHER Messages

The following are Ethernet MPC860 quad integrated communications controller error messages.

Error Message

```
%PQUICC_ETHER-5-COLL: Unit [dec], excessive collisions. Retry limit [dec] exceeded
```

Explanation An Ethernet cable is broken or is not terminated.

Recommended Action Check cables for proper connections and termination.

Error Message

```
%PQUICC_ETHER-5-HBEAT: Unit [dec], heartbeat check failure
```

Explanation The Ethernet transceiver is malfunctioning.

Recommended Action Replace the Ethernet transceiver.

Error Message

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

Explanation A software or hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation A new network may not have been engineered properly or adding a regenerator to an existing network may have changed the network specifications. This message refers only to the Ethernet connection and network. Ethernet has specific limitations for physical distance and number of nodes on a span. The Ethernet cable might be too long, or there could be too many repeaters with the result that the delay from one end to the other is too long. The Ethernet cable might be overloaded with too many users.

Recommended Action Ensure that your Ethernet cable is the correct length and that you do not have too many repeaters in use. If these conditions are not the problem, try removing hosts from the Ethernet segment to reduce the load.

Error Message

%PQUICC_ETHER-1-LOSTCARR: Unit [dec], lost carrier. Transceiver problem?

Explanation The Ethernet 10BASE-T cable is unplugged.

Recommended Action Reconnect the 10BASE-T Ethernet cable.

Error Message

%PQUICC_ETHER-1-TXERR: [chars]: Fatal transmit error. Restarting...

Explanation A fatal transmission error has occurred on the interface, causing the line to be restarted.

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

Error Message

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

Explanation During transmission of a frame, the local buffer of the controller chip received insufficient data because the data could not be transferred to the chip fast enough to keep pace with its output rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

Recommended Action The system should recover. No action is required. If the problem recurs, it indicates a hardware error that might be related to data traffic patterns. If this is the case, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

PQUICC_ETHERNET Messages

The following are Ethernet MPC860 quad integrated communications controller error messages.

Error Message

```
%PQUICC_ETHERNET-1-NOMEMORY: Unit [dec], no memory for [chars]
```

Explanation Insufficient memory exists to allocate the necessary memory pools.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PQUICC_ETHERNET-1-TXERR: [chars]: Fatal transmit error. Restarting...
```

Explanation A fatal transmission error has occurred on the Ethernet line, causing the line to be restarted.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

PQUICC_FE Messages

The following are Fast Ethernet MPC860 quad integrated communications controller error messages.

Error Message

```
%PQUICC_FE-4-BABBLE: PQUICC/FE([dec]/[dec]), Babble error
```

Explanation The transmitter has been on the channel longer than the time needed for transmitting the largest frame.

Recommended Action The system should recover. No action is required.

Error Message

```
%PQUICC_FE-5-COLL: PQUICC/FE([dec]/[dec]), Excessive collisions, TDR=[dec], TRC=[dec].
```

Explanation The Ethernet or Fast Ethernet interface is seeing multiple collisions. This condition may occur under heavy traffic loads.

Recommended Action The system should recover. No action is required.

Error Message

```
%PQUICC_FE-1-INITFAIL: PQUICC/FE([dec]/[dec]), Init failed, CSR[dec]=[hex]
```

Explanation The software has failed to initialize or restart an Ethernet or Fast Ethernet interface.

Recommended Action Clear the interface. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PQUICC_FE-1-INITFAILP: PQUICC/FE([dec]/[dec]), Init failed, CSR[dec]=[hex]
```

Explanation The FEC could not allocate an I/O buffer pool.

Recommended Action Clear the interface. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PQUICC_FE-5-LATECOLL: PQUICC/FE([dec]/[dec]), Late collision
```

Explanation Late collisions have occurred on the Ethernet or Fast Ethernet interface.

Recommended Action If the interface is Fast Ethernet, verify that both peers are in the same duplex mode. If the interface is Ethernet, the system should recover. No action is required.

Error Message

```
%PQUICC_FE-5-LOSTCARR: PQUICC/FE([dec]/[dec]), Lost carrier. Transceiver problem?
```

Explanation The cable and the transceiver are not connected.

Recommended Action Reconnect the cable and the transceiver.

Error Message

```
%PQUICC_FE-1-MEMERR: PQUICC/FE([dec]/[dec]), Memory error, CSR[dec]=[hex]
```

Explanation The interface could not access system resources for a long time. This problem may occur under very heavy traffic conditions.

Recommended Action The system should recover. No action is required. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PQUICC_FE-2-NOISL: Interface [chars] does not support ISL

Explanation The interface cannot be configured as an ISL trunk.

Recommended Action Check the configuration.

Error Message

%PQUICC_FE-3-OVERFLO: PQUICC/FE([dec]/[dec]), Receive overflow

Explanation While receiving a frame, the local buffer of the controller chip transmitted insufficient data because the data could not be transferred to DRAM fast enough for the buffer to keep pace with its input rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

Recommended Action The system should recover. No action is required.

Error Message

%PQUICC_FE-3-OWNERR: PQUICC/FE([dec]/[dec]), Buffer ownership error, pak=[hex]

Explanation The software has detected an error involving descriptor ownership.

Recommended Action If possible, try using a later version of Cisco IOS software. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PQUICC_FE-1-SHOWFAIL: PQUICC/FE([dec]/[dec]), Memory error, CSR[dec]=[hex]

Explanation The FEC could not allocate sufficient memory to display the controller.

Recommended Action Clear the interface. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PQUICC_FE-3-UNDERFLO: PQUICC/FE([dec]/[dec]), Transmit underflow

Explanation While transmitting a frame, the local buffer of the controller chip received insufficient data because the data could not be transferred to DRAM fast enough for the buffer to keep pace with its output rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

Recommended Action The system should recover. No action is required.

PQUICC_SERIAL Messages

The following are serial MPC860 quad integrated communications controller error messages.

Error Message

```
%PQUICC_SERIAL-3-CTSLOST: Unit [dec], Clear to Send Lost
```

Explanation The CTS input signal on a DTE serial interface became inactive while transmitting a frame. This problem is caused by either a communication line failure or a cable disconnection.

Recommended Action Check the serial interface cable and the communication equipment such as the CSU/DSU.

Error Message

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

Explanation The serial interface controller of the MPC860 quad integrated communications controller chip could not be initialized or started for operation. This error usually indicates a hardware problem.

Recommended Action Power-cycle the system. If the error recurs, replace the serial interface controller.

Error Message

```
%PQUICC_SERIAL-5-LINEFLAP: Unit [dec], excessive modem control changes
```

Explanation The system has received too many modem control signal interrupts. Modem control signals are hardware handshake signals between DTE and DCE. The signals include either a DCD or a DSR, or both a DCD and a DSR.

Recommended Action Check the serial interface cable. This error can occur if the cable is disconnected or has come loose and is picking up noise. If the cable appears to be correctly connected, check the equipment that is connected to the cable.

Error Message

```
%PQUICC_SERIAL-5-LOSTCARR: Unit [dec], carrier detect signal lost during message  
reception
```

Explanation The DCD signal was deasserted during message reception. The DCE equipment is responsible for asserting this signal.

Recommended Action Check the serial interface cable. This error can occur if the cable is disconnected.

Error Message

%PQUICC_SERIAL-3-OVERFLO: Unit [dec], overflow error

Explanation While receiving a frame, the FIFO method of the controller chip encountered overflow. Normally, such a problem is temporary, depending on receive peak loads within the system.

Recommended Action The system should recover. No action is required. If the problem recurs, it indicates a hardware error that might be related to data traffic patterns. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation While transmitting a frame, the local buffer of the serial controller chip has received insufficient data because data could not be transferred to the chip fast enough for the buffer to keep pace with its output rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

Recommended Action The system should recover. No action is required. If the problem recurs, it indicates a hardware error that might be related to data traffic patterns. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

PS Messages

The following are power supply error messages.

Error Message

%PS-3-DCOUTPUTVOLTFAIL: System detected Power System [dec] DC FAIL condition.

Explanation The power system has experienced a DC failure. One of the DC outputs on the power supply has failed.

Recommended Action Identify which DC output has failed. When there is a DC failure, you must replace the power supply.

Error Message

%PS-3-DCOUTPUTVOLTOK: Power System DC condition is now normal

Explanation The power system DC is now normal.

Recommended Action This is an information message only. No action is required.

Error Message

```
%PS-1-INITSYS: [chars]
```

Explanation An attempt to create an environmental monitor process has failed. The amount of memory available in the router may not be sufficient.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%PS-3-INPUTVOLTFAIL: System detected Power System [dec] AC FAIL condition.
```

Explanation The power system has experienced an AC failure. One of the AC inputs on the power supply has failed.

Recommended Action Identify which AC input has failed. Ensure that the AC circuit in your building is operational, verify that the power cord is plugged into the power supply, and ensure that the AC power switch to the power supply is on.

Error Message

```
%PS-3-INPUTVOLTOK: Power System AC condition is now normal
```

Explanation The power system AC is now normal.

Recommended Action This is an informational message only. No action is required.

Error Message

```
%PS-3-MULTFAIL: There is more than one failure with the Power System [dec]; please  
resolve problems immediately
```

Explanation The power system has experienced multiple failures that must be resolved immediately.

Recommended Action Examine the LEDs on the front panel of the power supply to identify and resolve the problems causing the failures.

Error Message

```
%PS-3-OVERTEMP_OK: System temperature is now normal.
```

Explanation The system is now operating at a normal temperature. The system previously detected a too-high temperature condition that has now cleared. This condition was most likely caused by a high ambient temperature in the area in which the router is located.

Recommended Action No action is required.

Error Message

`%PS-3-PSOK: Power System is now normal`

Explanation The power system is now operating normally.

Recommended Action This is an informational message only. No action is required.

Error Message

`%PS-3-THERMAL: System detected Power System [dec] THERMAL FAIL condition.`

Explanation The system has detected a too-high temperature condition that is probably caused by a high ambient temperature in the area in which the router is located.

Recommended Action Ensure that the temperature is normal in the area where the router is located and resolve any conditions that are causing a temperature increase.

Error Message

`%PS-3-THERMOK: Power System THERMAL condition is now normal.`

Explanation The power system thermal condition is now normal. The power supply previously detected an too-high temperature condition that has now cleared. This condition was most likely caused by a high ambient temperature in the area in which the power supply is located. A power system thermal condition can also be caused by a fan failure in the power supply.

Recommended Action No action is required.

PV Messages

The following are private VLAN error messages.

Error Message

`%PV-6-PV_MSG: [chars] a private vlan mapping, Primary [dec], Secondary [dec]`

Explanation A private VLAN has been created or purged.

Recommended Action No action is required.

PW_WATCHER Messages

The following are Portware Watcher error messages.

Error Message

`%PW_WATCHER-3-NO_RESPONSE_STARTUP_REQ: Portware Watcher detected a missing modem board startup message for slot [dec]. Resetting the slot`

Explanation The slot did not send a startup message after a given number of retries. The slot may not have sent the startup message if the Portware Watcher feature was not redownloaded with a new image after a router shelf reload and if the port of the NIP_MODEM_MNGR client was not reinitialized correctly and therefore remained closed. This error is not a critical problem, and it should not affect the operation of the router.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%PW_WATCHER-6-UNEXPECTED_DOWNLOAD: Portware Watcher detected an unregistered module download in slot [dec] module [dec].`

Explanation The Portware Watcher process was not initialized with the slot and module information to monitor the download. The operation of the module and the operation of the system in general will not be affected.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

PXF Messages

The following are PXF error messages.

Error Message

`%PXF-2-BADCHKSUM: Bad PXF microcode checksum, expected [dec], got [dec].`

Explanation The checksum evaluated through the microcode does not match the checksum recorded in the header of the specified packet. The software image has probably been corrupted.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PXF-2-BADREAD: Read failed for [chars] on PXF [chars].

Explanation A read error on the file has occurred during the microcode image load on the PXF column.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PXF-2-DISABLED: PXF [chars] disabled (too many restarts).

Explanation A PXF coprocessor has been restarted too many times during the past 30 seconds, indicating that a recurring error has not been resolved. To reenable the PXF coprocessor, a microcode reload or a router reload should be performed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PXF-2-DOWNLOAD: Could not download the microcode into PXF processor [chars].

Explanation A software or hardware error has prevented microcode from being downloaded to PXF.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PXF-2-EXCEPTION: PXF exception on unit [chars].

Explanation An unexpected, unrecoverable exception has occurred on PXF.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PXF-2-HDRCORRUPT: PXF microcode header has been corrupted, expected [hex], got [hex].

Explanation The PXF microcode appears to be corrupted. The microcode corruption could have been caused by an already corrupted image or, less likely, by a software problem.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PXF-2-INVALID: Corrupted PXF microcode retrieved from the image bundle for [chars]

Explanation The retrieved microcode appears to be corrupted.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PXF-2-NONEXIST: Could not open or stat [chars] for PXF [chars].

Explanation The PXF microcode may not be correctly bundled into the image, or a software error may have occurred and prevented the microcode from being located.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PXF-2-RESTARTED: PXF [chars] restarted.

Explanation A PXF coprocessor has been restarted, either manually using a microcode reload or as a result of an exception.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%PXF-2-TALLOCFAIL: Allocation failed of [dec] bytes on PXF [chars]

Explanation The requested allocation of space in the PXF memory was not possible because of a lack of available memory resources.

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

Error Message

%PXF-2-WRONGHARD: The microcode type does not match, expected [hex] for PXF, got [hex].

Explanation The images may have been corrupted or, less likely, an incorrect microcode set may have been bundled into the image.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

QA Messages

The following are queue and accumulator error messages.

Error Message

```
%QA-3-ALLOC: [chars]
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show version** and **show cont cbus** commands to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show version** and **show cont cbus** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%QA-3-DIAG: [chars]
```

Explanation This is a diagnostic message. This message appears after a QA error and contains diagnostic information regarding that error.

Recommended Action Copy the original QA error message and all the following QA diagnostic error messages exactly as they appear. Issue the **show version** and **show cont cbus** commands to gather additional data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show version** and **show cont cbus** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

QEM Messages

The following are QEM driver error messages.

Error Message

```
%QEM-3-DISCOVER: Found [chars] switch processors
```

Explanation The QEM driver either found no switch processors or found more than one. Exactly one is the only supported configuration.

Recommended Action Ensure that there is only one switch processor.

QLLC Messages

The following are QLLC error messages.

Error Message

`%QLLC-3-BADOPCODE: Opcode [chars] is invalid`

Explanation Either RSRB or local acknowledgment is configured incorrectly.

Recommended Action Identify which of these is configured incorrectly and correct the configuration.

Error Message

`%QLLC-3-BADQLLCSTATE: Bad qllc state - [chars]`

Explanation An invalid QLLC primitive was detected.

Recommended Action Ensure that the partner QLLC device is configured correctly.

Error Message

`%QLLC-3-BADRSRBOPCODE: Bad opcode [hex] from [enet] to [enet]`

Explanation Either RSRB is configured incorrectly or the other RSRB device is down.

Recommended Action Ensure that RSRB is configured correctly with the correct version of Cisco IOS software.

Error Message

`%QLLC-3-BADSTATE: Bad qllc state - [chars] - [enet]`

Explanation An invalid QLLC primitive was detected.

Recommended Action Ensure 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 specified QLLC primitive has placed the router in an invalid state.

Recommended Action Ensure that the Token Ring ports and any participating LAN devices are configured correctly.

Error Message

%QLLC-3-BAD_XID: Sna configuration error for [enet]: Lan device is PU2.1, X.25 device is PU2.0 (XID Format 1)

Explanation The IBM Gateway (Cisco 3172) or front-end processor on the LAN is sending XID Format 3, which is used to communicate with PU2.1 devices. The X.25 device is a PU2.0 (Cisco 3174) that is configured to send XID Format 1 messages. This is a very rare situation. A likely cause is that the revision levels on the IBM equipment are incompatible.

Recommended Action Check the revision levels on the external equipment, and upgrade them if necessary.

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 Ensure that the QLLC 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 given with the error message. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%QLLC-3-IFRAME: [chars]

Explanation An I-frame was discarded because of network congestion.

Recommended Action Ensure that the LAN is not beaconing and that it is not in a congested state. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%QLLC-3-INCALL_CFG: Incoming call: No QLLC Service Access Point Configured for x.25 subaddress [chars]

Explanation A remote X.25 device that is calling the router for QLLC service is using a subaddress that was not configured by the X.25 routing facility. The subaddress was not configured for QLLC service.

Recommended Action Correct the QLLC configuration. Configure only the subaddress on the QLLC service, not the complete X.121 address that the remote X.25 device uses.

Error Message

%QLLC-3-INCALL_NO_PARTNER: Incoming call: No partner Mac Address configured - X.25 subaddress [chars]

Explanation There is an incoming call, but a connection cannot be initiated to a partner because no partner is configured in a **qllc dlsw** command.

Recommended Action To configure a partner for the incoming call, enter the **qllc dlsw partner** command.

Error Message

%QLLC-3-LNXNOTFOUND: lnx_remove_macaddr_hash did not find target lnx

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

Recommended Action Add a valid **qllc srb** statement for this serial interface.

Error Message

%QLLC-3-NOLLC2: Unable to open an llc2 session

Explanation An LLC2 session could not be established with the destination MAC address.

Recommended Action Ensure that the **qllc partner** statement in the configuration file is correct and that the partner is on the desired LAN.

Error Message

%QLLC-3-NOMACADDR: No lnx entry for macaddr [enet]

Explanation No virtual MAC address was defined for this interface.

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

Error Message

%QLLC-3-NOMEM: Not enough memory available

Explanation There is not enough memory in the system to complete the specified request.

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

Error Message

%QLLC-3-NONULLXID: Couldn't make null xid - [enet] -[enet]

Explanation An attempt to create an IEEE XID has failed.

Recommended Action Ensure 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 An expected packet was not sent to the LAN.

Recommended Action Ensure that the LAN partner is configured correctly and that the partner is on the desired LAN.

Error Message

%QLLC-4-NOQLLC: Unable to open qlc session, current state is [chars]

Explanation A QLLC session could not be established.

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

Error Message

%QLLC-3-NO_QLLCBUFFER: M bit Reassembly failed - couldn't allocate a packet

Explanation The router has run out of memory and cannot allocate buffers.

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

Error Message

%QLLC-3-NO_QSR: No QLLC Service Access Points defined

Explanation No QLLC services have been configured, although the router will accept incoming calls for QLLC.

Recommended Action Configure the QLLC service that is required.

Error Message

%QLLC-3-NO_RESOURCE: Incoming Call: Insufficient resources available

Explanation The router cannot accept incoming calls because of insufficient system memory.

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

Error Message

```
%QLLC-3-NOXID2: Couldn't make xid - [enet] -[enet]
```

Explanation The QLLC XID could not be forwarded to the LAN.

Recommended Action Ensure that the **qlc partner** command and the **qlc xid** commands are configured correctly.

Error Message

```
%QLLC-3-NULLPTR: [chars] ptr is null
```

Explanation The specified structure has not been configured.

Recommended Action Confirm the configuration commands for the structure.

Error Message

```
%QLLC-3-PARTNER_MISMATCH: Outgoing call: Partner Mac Address [enet] doesn't match configured partner [enet]
```

Explanation A device tried to connect to a QLLC VMAC from Token Ring, but the MAC address of that device does not match the partner that was specified in the **qlc dlsw** command.

Recommended Action Correct the QLLC configuration to match the appropriate partner.

Error Message

```
%QLLC-3-QLLCMAP_ERR: Incoming call: QLLC map entry not found
```

Explanation A software error has occurred in the router code.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

QM Messages

The following are Quality of Service (QoS) error messages.

Error Message

```
%QM-2-ACL_FAILURE: Interface [chars] traffic will not comply with ACLs in [chars] direction(s)
```

Explanation ACLs will not be applied to traffic for the specified interface because of TCAM resource contention.

Recommended Action The configured ACLs are too great in number to fit into the hardware TCAM. Try to share the same ACLs across multiple interfaces in order to reduce TCAM resource contention.

Error Message

%QM-2-AGGREG_FAILURE: Interface [chars] aggregate QoS will not comply with policymap in [chars] direction(s)

Explanation QoS will not be applied to traffic for this interface because of contention for aggregate policer resources.

Recommended Action There are too many configured aggregate policers to fit in the hardware aggregate RAM. Try to share the same aggregate policers across multiple classes or interfaces in order to reduce policer resource contention. Use the named QoS aggregates as a mechanism for sharing policers.

Error Message

%QM-4-AGGREG_PLC_IGNORED: 'police' command ignored in presence of 'police aggregate [chars]'

Explanation If both “police” and “police aggregate” are specified as policy actions for the same class, “police” will be ignored as long as the aggregate has been defined by the **mls qos aggregate** command.

Recommended Action Do not specify both “police” and “police aggregate” in the same class.

Error Message

%QM-2-BAD_MESSAGE: Error in internal messaging - bad result [dec]

Explanation A software error may have affected the programming of ACLs into the TCAM.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%QM-2-BAD_TLV: Error in internal messaging - bad tlv [dec]

Explanation A software error may have affected the programming of ACLs into the TCAM.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%QM-2-DSCP_NE: Different aggregate and microflow DSCP in class [chars][policy [chars]]

Explanation Conform actions in the **police** and **police flow** commands must be the same for the same class in a service policy applied to MLS interfaces.

Recommended Action Change the conform action in the **police** and **police flow** commands to make both conform actions the same, or remove one of two commands.

Error Message

%QM-3-ERROR: [chars] [chars]:[dec]

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%QM-3-ERROR_STAT: [chars] stat:[dec] in [chars]:[dec]

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%QM-4-IDB_MODE_CHANGE_SERV_POLICY: Interface [chars] service-policy is not preserved on transition to/from switchport

Explanation The service policy applied to the interface before the transition includes features that cannot be applied to the interface after the transition. Because a service policy is applied automatically, none of the features in its policy map are applied after the transition.

Recommended Action After the transition, install a different service policy that includes only applicable features on the interface.

Error Message

%QM-2-MICROFLOW_FAILURE: Interface [chars] microflow QoS will not comply with policymap in [chars] direction(s)

Explanation QoS will not be applied to traffic for this interface because of a contention for microflow policer resources.

Recommended Action There are too many configured microflow policers to fit in the hardware threshold RAM. Try to specify the same microflow policing parameters (rate and burst) across multiple classes and interfaces in order to reduce the policer resource contention.

Error Message

%QM-2-NO_AGGREG_PLC: Hardware aggregate policer resources exceeded

Explanation The hardware does not have the capacity to handle all the aggregate policers that are required by the configuration.

Recommended Action Reduce the total number of aggregate policers that are required by all service policies installed in the device. For example, use shared aggregate policers, as defined by the **mls qos aggregate-policer** command, instead of the **per-interface policers default** command.

Error Message

%QM-2-NO_AGGREG_PLC_IF: Out of hardware aggregate policers (policy [chars], class [chars], interface [chars])

Explanation The hardware does not have the capacity to handle the aggregate policers that are required by the service policy class for the specified interface.

Recommended Action Reduce the total number of aggregate policers that are required by all service policies installed in the device. For example, use shared aggregate policers, as defined by **mls qos aggregate-policer** command, instead of the **per-interface policers default** command.

Error Message

%QM-2-NO_FLOW_PLC: Hardware microflow policer resources exceeded

Explanation The hardware does not have the capacity to handle the microflow policers that are required by the policy map.

Recommended Action Adjust the microflow policing rate and burst parameters so that the total number of different rate and burst combinations in the device is reduced.

Error Message

%QM-2-SEQUENCE: Error in internal messaging - lost message (i/f [chars], dir [chars], type [dec])

Explanation A software error may have affected the programming of ACLs into the TCAM.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%QM-2-TCAM_BAD_LOU: Bad TCAM LOU operation in ACL

Explanation A software error has caused the programming of ACLs into the TCAM to fail.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%QM-4-TCAM_CAPMAP: Interface [chars] hardware TCAM LOU usage capability exceeded

Explanation The hardware TCAM does not have the capacity to handle the number of logical operations that are used with the configured ACLs on the specific interface.

Recommended Action The hardware TCAM can handle a maximum of 9 logical operations per interface and up to 64 logical operations in total. Reduce the number of logical operations used in the ACLs.

Error Message

%QM-4-TCAM_ENTRY: Hardware TCAM entry capacity exceeded

Explanation The hardware TCAM does not have the capacity to handle all of the configured ACLs.

Recommended Action There are too many configured ACLs to fit into the hardware TCAM. Try to share the same ACLs across multiple interfaces in order to reduce the TCAM resource contention.

Error Message

%QM-2-TCAM_ERROR: TCAM programming error [dec]

Explanation A software error has caused the programming of ACLs into the TCAM to fail.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%QM-4-TCAM_LABEL: Hardware TCAM label capacity exceeded

Explanation The hardware TCAM does not have the capacity to handle the number of interfaces that are configured with ACLs.

Recommended Action The hardware TCAM can handle a maximum of 500 interfaces configured with ACLs. Deconfigure ACLs from some of the interfaces.

Error Message

%QM-4-TCAM_LOU: Hardware TCAM LOU capacity exceeded

Explanation The hardware TCAM does not have the capacity to handle the number of logical operations that are used with the configured ACLs.

Recommended Action The hardware TCAM can handle a maximum of 9 logical operations per interface and up to 64 logical operations in total. Reduce the use of logical operations in the ACLs.

Error Message

%QM-2-TCAM_MEMORY: NMP processor memory low

Explanation The programming of ACLs into the TCAM has failed because of inadequate memory.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

QUICC Messages

The following are MC68360 quad integrated communications controller error messages.

Error Message

```
%QUICC-1-BADHDXFSM: Quicc([dec]/[dec]), Unexpected HDX state [dec], event [dec]
```

Explanation An invalid transmission or reception event has been detected for half duplex.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%QUICC-1-CTSLOST: QUICC([dec]/[dec]), Clear to Send Lost
```

Explanation The CTS input signal on a DTE serial interface became inactive while transmitting a frame. This problem is a result of a communication line failure or cable disconnection.

Recommended Action Check the serial interface cable or communication equipment, such as the CSU/DSU.

Error Message

```
%QUICC-1-INITFAIL: QUICC([dec]/[dec]), SCC[dec] init failed
```

Explanation The software has failed to initialize or restart a 1T serial card.

Recommended Action Clear the serial interface. If the message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%QUICC-1-LINEFLAP: Quicc([dec]/[dec]), Excessive modem control changes
```

Explanation The system has received too many modem control signal interrupts. Modem control signals are hardware handshake signals between DTE and DCE. The signals include either a DCD or a DSR, or both DCD and DSR.

Recommended Action Check the serial interface cable. This error can occur if the cable is disconnected or has come loose and is picking up noise. If the cable appears to be correctly connected, check the equipment connected to the cable.

Error Message

```
%QUICC-1-NOMEMORY: Unit [dec], no memory for [chars]
```

Explanation The MC68360 quad integrated communications controller CPU was unable to access the memory it needs to carry out its functions. Some possible causes are as follows:

- The network is large, requiring a lot of memory for routing tables.
- The router configuration has many features enabled, each of which requires a certain amount of memory.
- A software error (memory leak) exists.

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

Error Message

```
%QUICC-3-OWNERR: Unit [dec], buffer ownership error, pak = [hex]
```

Explanation An internal software error has occurred.

Recommended Action Contact your Cisco technical support representative to obtain a Cisco IOS software upgrade.

Error Message

```
%QUICC-1-TOOBIG: Quicc([dec]/[dec]), packet too big
```

Explanation A packet greater than the assigned MTU of this serial interface has been queued for transmission.

Recommended Action The system should recover. No action is required. If the message recurs, it may indicate an error related to data traffic patterns. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%QUICC-1-TOOSMALL: Quicc([dec]/[dec]), packet was less than 2 bytes
```

Explanation A small packet (less than 2 bytes) has been queued for transmission. The interface cannot handle such small packets for transmission.

Recommended Action The system should recover. No action is required. If the message recurs, it may indicate a hardware error related to data traffic patterns. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%QUICC-3-UCODE_REV_UNKN: Unknown microcode revision number: [dec]

Explanation The MC68360 quad integrated communications controller CPU was running an unexpected version of microcode. This situation could occur if a new version of the MC68360 quad integrated communications controller chip were released or if a very old version were used in the manufacturing process of that chip. This situation could also occur if a new version of microcode were released to fix any bugs.

Recommended Action A decrease in performance might occur if there are any asynchronous interfaces running PPP. Contact your Cisco technical support representative if this is an issue.

Error Message

%QUICC-1-UNDERFLO: QUICC([dec]/[dec]), Transmit underflow

Explanation While a frame was being transmitted, the local buffer of the serial controller chip received insufficient data because data could not be transferred to the chip fast enough for the buffer to keep pace with its output rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

Recommended Action The system should recover. No action is required.

Error Message

%QUICC-1-UNEXPECTED_INTERRUPT: Quicc([dec]), Unexpected modem-signal interrupt

Explanation The software did not expect a modem control signal change on this type of WIC interface.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%QUICC-3-UNKNOWN_SCCS: Quicc, Incorrect SCC number

Explanation An internal software error has occurred.

Recommended Action Contact your Cisco technical support representative to obtain a software upgrade.

Error Message

%QUICC-1-UNKNOWN_WIC: Quicc([dec]), wic card has an unknown id of [hex]

Explanation The software does not recognize the type of WIC plugged into the port module.

Recommended Action Check the part number on the WIC to verify that it is supported in the Cisco IOS release operational on the router, or contact your Cisco technical support representative.

Error Message

%QUICC-1-UNSUPPORTED_CONFIG: Slot [dec] has an unsupported combination of ISDN WAN interface cards

Explanation The type of BRI card in slot 1 is incompatible with the type of BRI card in slot 0.

Recommended Action Remove the BRI card in one of the slots.

Error Message

%QUICC-1-WRONG_SLOT: Quicc([dec]), BRI card in wrong slot(1)

Explanation The BRI card is not supported in WIC slot 0.

Recommended Action Power down, move the BRI card to the other WIC slot on the port module, and reboot.

QUICC_ASYNC Messages

The following are asynchronous MC68360 quad integrated communications controller error messages.

Error Message

%QUICC_ASYNC-3-CTSLOST: Unit [dec], Clear to Send Lost

Explanation The CTS input signal on a DTE serial interface became inactive while sending a frame. This problem is caused by either a communication line failure or a cable disconnection.

Recommended Action Check the serial interface cable and the communication equipment such as the CSU/DSU.

QUICC_ETHER Messages

The following are Ethernet MC68360 quad integrated communications controller error messages.

Error Message

%QUICC_ETHER-5-COLL: Unit [dec], excessive collisions. Retry limit [dec] exceeded

Explanation An Ethernet cable is broken or is not terminated.

Recommended Action Check the cables for proper connections and termination.

Error Message

%QUICC_ETHER-5-HBEAT: Unit [dec], heartbeat check failure

Explanation The Ethernet cable might be too long, or there could be too many repeaters, causing the delay from one end to the other to be too long. The Ethernet cable might be overloaded with too many users.

Recommended Action Ensure that your Ethernet cable is the correct length and that you do not have too many repeaters in use. If these conditions are not the problem, try removing hosts from the Ethernet segment to reduce the load.

Error Message

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

Explanation A software or hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation The Ethernet cable might be too long, or there could be too many repeaters causing the delay from one end to the other to be too long. The Ethernet cable might be overloaded with too many users.

Recommended Action Ensure that your Ethernet cable is the correct length and that you do not have too many repeaters in use. If these conditions are not the problem, try removing hosts from the Ethernet segment to reduce the load.

Error Message

%QUICC_ETHER-1-LOSTCARR: Unit [dec], lost carrier. Transceiver problem?

Explanation The Ethernet 10BASE-T cable is unplugged.

Recommended Action Reconnect the 10BASE-T Ethernet cable.

Error Message

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

Explanation While a frame was being transmitted, the local buffer of the Ethernet controller chip received insufficient data because data could not be transferred to the chip fast enough for the buffer to keep pace with its output rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

Recommended Action The system should recover. No action is required. If the problem recurs, it indicates a hardware error that might be related to data traffic patterns. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

QUICC_SERIAL Messages

The following are serial MC68360 quad integrated communications controller error messages.

Error Message

%QUICC_SERIAL-3-CTSLOST: Unit [dec], Clear to Send Lost

Explanation The CTS input signal on a DTE serial interface became inactive while transmitting a frame. This problem is a result of a communication line failure or cable disconnection.

Recommended Action Check the serial interface cable or communications equipment such as the CSU/DSU.

Error Message

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

Explanation The serial interface controller of the QUICC chip could not be initialized or started for operation. This error probably indicates a hardware problem.

Recommended Action Power-cycle the system. If the error recurs, replace the unit.

Error Message

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

Explanation The system has received too many modem control signal interrupts. Modem control signals are hardware handshake signals between DTE and DCE. The signals include either a DCD or a DSR, or both a DCD and a DSR.

Recommended Action Check the serial interface cable. The error can occur if the cable is disconnected or has come loose and is picking up noise. If the cable appears to be correctly connected, check the equipment connected to the cable.

Error Message

```
%QUICC_SERIAL-5-LOSTCARR: Unit [dec], carrier detect signal lost during message reception
```

Explanation The RS-232C DCD signal was deasserted during message reception. The DCE equipment is responsible for asserting this signal. This error can occur if the cable is disconnected.

Recommended Action Ensure that the serial interface cable is connected.

Error Message

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

Explanation While a frame was being transmitted, the local buffer of the serial controller chip received insufficient data because the data could not be transferred to DRAM fast enough for the buffer to keep pace with its output rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

Recommended Action The system should recover. No action is required. If the problem recurs, it indicates a hardware error that might be related to data traffic patterns. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

RAC Messages

The following are RAC error messages.

Error Message

```
%RAC-3-RACNOIPL: Can not find lease information for interface [chars]
```

Explanation DHCP lease information for the interface is missing.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RAC-3-RACNOQ: Can't create RAC work queue
```

Explanation An internal software error has occurred, probably because of insufficient memory resources.

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

RADIO Messages

The following are radio driver error messages.

Error Message

```
%RADIO-4-BAD_IF_PIC: Radio[dec]/0, bad IF PIC version ([dec]) on IDU
```

Explanation The hardware configuration may be incorrect. An unit that is not running the correct image is likely being used. The system has detected a version mismatch between what the Cisco IOS software had expected and what the PIC device is reporting.

Recommended Action Contact your Cisco technical support representative to confirm that a production Cisco IOS image is running. If not, replace the unit.

Error Message

```
%RADIO-4-BAD_RF_PIC: Radio[dec]/0, bad RF PIC version ([dec]) on ODU [dec]
```

Explanation The hardware configuration may be incorrect. An unit that is not running the correct image is likely being used. The system has detected a version mismatch between what the Cisco IOS software had expected and what the PIC device is reporting.

Recommended Action Contact your Cisco technical support representative to confirm that a production Cisco IOS image is running. If not, replace the unit.

Error Message

```
%RADIO-4-CHECKSUM_ERR: Radio[dec]/0, radio phy eeprom "[chars]" checksum  
(stored:[hex], calculated:[hex])
```

Explanation The checksum is failing, possibly because the data in the EEPROM is corrupt. This error may be caused by a hardware malfunction, but it could also be caused by an attempt to use an engineering unit rather than a production unit.

Recommended Action Contact your Cisco technical support representative to replace the unit.

Error Message

```
%RADIO-5-CLEAR_METRICS: Radio[dec]/0, link metrics cleared
```

Explanation The user has requested that the link metrics be cleared.

Recommended Action No action is required.

Error Message

```
%RADIO-5-CONFIG_HW: Radio[dec]/0, hardware does not support requested configuration: [chars]
```

Explanation The hardware does not support the requested configuration.

Recommended Action Change the configuration to match the hardware.

Error Message

```
%RADIO-5-CONFIG_MISMAT: Radio[dec]/0, invalid or inconsistent configuration requested [chars]
```

Explanation The ARQ settings are not supported by the current radio channel parameters.

Recommended Action Use the **radio arq reset** command to change ARQ settings to allowed values, given the current radio channel parameters.

Error Message

```
%RADIO-4-DSPHPITIMEOUT: Radio[dec]/0, HPI timeout while attempting to access DSP "[chars]"
```

Explanation A DSP on the radio line card did not grant access to its memory. A DSP firmware internal error has probably occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RADIO-4-DSPINDERR: Radio[dec]/0, Error processing indication from DSP "[chars]" ([chars]:[dec])
```

Explanation A DSP on the radio line card has generated an indication message that could not be processed. Messages are not processed when the router is operating under a severe traffic load.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RADIO-4-DSPSPURRESP: Radio[dec]/0, spurious DSP response from "[chars]": [hex] [hex] [hex] [hex] [hex] [hex] [hex]
```

Explanation A DSP on the radio line card has generated a response message unexpectedly. Messages are not processed when the router is operating under a severe traffic load.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RADIO-4-DSPULOFLOW: Radio[dec]/0, uplink message queue overflow reported by DSP "[chars]"
```

Explanation At least one DSP-to-router message was lost because the uplink queue of that DSP was full. DSP-to-router messages can be lost when many thresholds, histograms, or timelines are being triggered or are expiring at the same time.

Recommended Action Change the thresholds or reduce histogram or time line usage to ease the load on the system.

Error Message

```
%RADIO-4-FPGADONEPINLOW: Radio[dec]/0, DONE pin on FPGA "[chars]" did not assert after downloading
```

Explanation The DONE pin of an FPGA device on the radio line card did not assert after the device was downloaded. This error message likely indicates an existing or developing hardware failure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RADIO-4-FPGAINITPINHIGH: Radio[dec]/0, INIT pin on FPGA "[chars]" asserted during downloading
```

Explanation The INIT pin of an FPGA device on the radio line card asserted midway through the downloading of the device. The most likely cause of this error is a corrupted FPGA image.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RADIO-4-FPGAINITPINLOW: Radio[dec]/0, INIT pin on FPGA "[chars]" not asserted when PROG pin asserted
```

Explanation The INIT pin of a FPGA device on the radio line card did not assert when the PROG pin was asserted. The most likely cause of this error is either a faulty FPGA device or software problem caused by resetting a faulty FPGA device.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RADIO-4-IF_COMM: Radio[dec]/0, IDU IF internal serial communication error -  
[chars]
```

Explanation An internal serial communication error has occurred. The most likely cause of this error is a loose IF baby board.

Recommended Action Replace the loose IF baby board.

Error Message

```
%RADIO-4-IF_OSC: Radio[dec]/0, Internal [chars] Oscillator out of Lock [chars]
```

Explanation A hardware error has occurred. The most likely cause of this error is vibration or hardware failure.

Recommended Action Replace the internal card.

Error Message

```
%RADIO-5-IMAGE_BAD_CRC: [chars][dec]/[dec], detected a bad CRC while downloading  
image "[chars]" to chip "[chars]"
```

Explanation An internal software error has occurred. The most likely cause of this error is a protocol error during downloading.

Recommended Action If the download is a TFTP download, try it again. If the error recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RADIO-6-IMAGE_NOT_FOUND: [chars][dec]/[dec], could not find image "[chars]" for  
chip "[chars]"
```

Explanation An internal software error has occurred. The most likely cause of this error is an incorrectly typed URL for the image.

Recommended Action Enter the correct URL.

Error Message

```
%RADIO-5-IMAGE_TIMEOUT: [chars][dec]/[dec], timeout trying to open image  
"[chars]" for chip "[chars]"
```

Explanation An internal software error has occurred. The most likely cause of this error is a protocol error that occurred while the image was being opened.

Recommended Action If the download is a TFTP download, try it again. If the error recurs, call your Cisco technical support representative.

Error Message

%RADIO-5-LOCAL_IN_SYNC: Radio[dec]/0, Link synchronization acquired.

Explanation The physical layer has successfully acquired a link.

Recommended Action No action is required.

Error Message

%RADIO-5-LOCAL_NO_CW: Radio[dec]/0, Still trying to establish link (validate codeword).

Explanation An internal software error has occurred. The most likely cause of this error is that the remote system is not sending on the correct frequency.

Recommended Action Enter the **no shut** command for the remote system.

Error Message

%RADIO-5-LOCAL_NO_FREQ: Radio[dec]/0, Still trying to establish link (frequency sync).

Explanation An internal software error has occurred. The most likely cause of this error is that the remote system is not sending on the correct frequency.

Recommended Action Enter the **no shut** command for the remote system.

Error Message

%RADIO-5-LOCAL_NO_SYNC: Radio[dec]/0, Still trying to establish link (timing sync).

Explanation An internal software error has occurred. The most likely cause of this error is that the remote system is not sending on the correct timing frequency.

Recommended Action Enter the **no shut** command for the remote system.

Error Message

%RADIO-5-LOCAL_NO_TRANSMIT: Radio[dec]/0, ODU saftey interlock is preventing transmission. Check ODU and cables. [chars]

Explanation An internal software error has occurred. The most likely cause of this error is an unattached cable or an overheated ODU.

Recommended Action Check the ODU and cables.

Error Message

```
%RADIO-5-LOCAL_NO_VITERBI: Radio[dec]/0, Still trying to establish link (viterbi sync).
```

Explanation An internal software error has occurred. The most likely cause of this error is that the remote system is not sending on the correct frequency.

Recommended Action Enter the **no shut** command for the remote system.

Error Message

```
%RADIO-5-METRICS_THRESH: Radio[dec]/0, [chars] per [chars] threshold met([dec]>=[dec])
```

Explanation An internal software error has occurred. The most likely cause of this error is a misaligned antenna.

Recommended Action Realign the antenna.

Error Message

```
%RADIO-4-NEWER_IF_EEPROM: Radio[dec]/0, Unsupported IF PIC major eeprom version ([int]) on IDU
```

Explanation The Cisco IOS software should be upgraded to support the new EEPROM.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RADIO-4-NEWER_RF_EEPROM: Radio[dec]/0, Unsupported RF PIC major eeprom version ([int]) on ODU [dec]
```

Explanation The Cisco IOS software should be upgraded to support the new EEPROM.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RADIO-4-NO_HWCAP_FIELD: Radio[dec]/0, could not find HW Capabilities field in IDPROM
```

Explanation An internal software error has occurred. The most likely cause of this error is an improperly programmed IDPROM.

Recommended Action Reprogram the IDPROM on the line card.

Error Message

%RADIO-4-NO_IMAGE: [chars][dec]/[dec], Chip "[chars]": failed to find image given current configuration

Explanation An internal software error has occurred. The most likely cause of this error is that the configuration uses external files.

Recommended Action Change the configuration to use internal files.

Error Message

%RADIO-4-PHY_REQ: Radio[dec]/0, link synchronization [chars].

Explanation An internal software error has occurred. The most likely cause of this error is a loose ODU cable.

Recommended Action Check the ODU cables.

Error Message

%RADIO-5-PHY_RETRY: Radio[dec]/0, event [chars] in state [chars]

Explanation An internal software error has occurred. The most likely cause of this error is an incorrect configuration.

Recommended Action Review the configuration and hardware capabilities.

Error Message

%RADIO-4-PHY_SYNC_FAIL: Radio[dec]/0, link synchronization [chars].

Explanation An error has occurred. The most likely cause of this error is a loose ODU cable.

Recommended Action Check the ODU cables.

Error Message

%RADIO-5-PHY_SYNC_LOST: Radio[dec]/0, Lost link. Check remote transmitter.

Explanation An internal software error has occurred. The most likely cause of this error is a remote system that is not sending.

Recommended Action Enter the **no shut** command for the remote system.

Error Message

%RADIO-4-PHY_SYNC_OK: Radio[dec]/0, link synchronization acquired.

Explanation An internal software error has occurred. The most likely cause of this error is that the **no shut** command was entered.

Recommended Action No action is required.

Error Message

%RADIO-4-PHY_SYNC_REOK: Radio[dec]/0, link synchronization re-acquired.

Explanation An internal software error has occurred. The most likely cause of this error is that the **no shut** command was entered on the remote end.

Recommended Action No action is required.

Error Message

%RADIO-5-REMOTE_LOST_SYNC: Radio[dec]/0, Remote end reports: [chars]

Explanation A hardware error has occurred. The most likely cause of this error is an unattached cable or an overheated ODU.

Recommended Action Check the ODU cables.

Error Message

%RADIO-5-REMOTE_NO_SYNC: Radio[dec]/0, Remote end reports: Unable to acquire link synchronization.

Explanation A hardware error has occurred. The most likely cause of this error is an unattached cable or an overheated ODU.

Recommended Action Check the ODU cables.

Error Message

%RADIO-4-RF_AGC: Radio[dec]/0, ODU [dec] max transmitter power exceeded [chars]

Explanation A hardware failure has occurred.

Recommended Action Replace the RF ODU.

Error Message

%RADIO-4-RF_ANTENNA: Radio[dec]/0, ODU [dec] is [chars]

Explanation A hardware error has occurred. The most likely cause of this error is a disconnected cable.

Recommended Action Check or replace the cable from the UBR to the ODU.

Error Message

%RADIO-4-RF_COMM: Radio[dec]/0, ODU [dec] serial communication error - [chars]

Explanation A hardware error has occurred. The most likely cause of this error is a disconnected cable.

Recommended Action Check or replace the cable from the UBR to the ODU.

Error Message

%RADIO-4-RF_OSC: Radio[dec]/0, ODU [dec] [chars] Oscillator out of Lock [chars]

Explanation A hardware error has occurred. The most likely cause of this error is vibration or hardware failure.

Recommended Action Replace the electronics on the ODU.

Error Message

%RADIO-2-RF_OVERTEMP: Radio[dec]/0, ODU [dec]: over temperature [chars]

Explanation A hardware error has occurred. The most likely cause of this error is hardware failure or solar heating.

Recommended Action Keep the RF ODU cool.

Error Message

%RADIO-4-RF_TEMP: Radio[dec]/0, ODU [dec]: temperature is [dec] degrees C, threshold is [dec] degrees C

Explanation A hardware error has occurred. The most likely cause of this error is hardware failure or solar heating.

Recommended Action Keep the RF ODU cool.

Error Message

%RADIO-4-RF_VOLT: Radio[dec]/0, ODU [dec]: supply voltage out of range [chars]

Explanation A hardware error has occurred.

Recommended Action Replace the RF ODU.

Error Message

%RADIO-3-SELF_TEST_FAILED: Radio[dec]/0, failed self-test

Explanation A hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RADIO-6-SELF_TEST_SUCCESS: Radio[dec]/0, self-test successful

Explanation The system has passed a self-diagnostic test.

Recommended Action No action is required. Passing the self-diagnostic test is the desired result.

Error Message

%RADIO-5-THRESHOLD: Radio[dec]/0, [chars] [chars] threshold crossed ODU [dec]

Explanation An internal software error has occurred. The most likely cause of this error is a user-defined threshold.

Recommended Action No action is required.

RADIO_DRIVER Messages

The following are radio driver error messages.

Error Message

%RADIO_DRIVER-1-DISCOVER: Only found [dec] interfaces on bay [dec], shutting down bay

Explanation A system or hardware failure has occurred.

Recommended Action Replace the line card.

Error Message

%RADIO_DRIVER-3-DMADESCSEQERR: DMAC detected a descriptor sequence error (DMAC Status Register is [hex]).

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RADIO_DRIVER-3-LOCALBUSERR: A line card local bus error, error status [hex], error address [hex]

Explanation A device on the radio line card local bus either did not respond to a selection, timed out once selected, or issued an error message while selected. This action probably indicates an existing or developing hardware failure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RADIO_DRIVER-3-NOTRADIO: Device reported [hex]

Explanation A hardware error has occurred.

Recommended Action Replace the defective hardware.

Error Message

%RADIO_DRIVER-3-PCIPERROR: DMAC reported PCI parity error (DMAC Status Reg: [hex])

Explanation A parity error has occurred on the PCI bus while the radio DMA controller was performing a read/write operation. This parity error probably indicates an existing or developing hardware failure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RADIO_DRIVER-3-PCITARGETABORT: Device received a PCI Target Abort (DMAC Status Register is [hex])

Explanation When the device was attempting a PCI master read/write operation, the target issued an abort to the DMA controller. This error usually indicates that an incorrect target was selected, and in this case it means that shared packet memory was not the target. This is likely a software error causing the radio DMAC to access an invalid target.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

RADIUS Messages

The following are RADIUS error messages.

Error Message

%RADIUS-3-ALLDEADSERVER: Group [chars]: No active radius servers found. Id [dec].

Explanation All RADIUS servers in the server group were found to be unresponsive after the RADIUS server request, with the ID that is used by the RADIUS server protocol, was retransmitted and timed out. This message appears only if the radius-server deadtime command has been entered to cause unavailable servers to be immediately skipped.

Recommended Action Check the network connectivity to the RADIUS servers and ensure that the servers are running. If the server is running and there is network connectivity with the server, the request may get dropped at the input or output queue of the network interface by UDP, or the request

may get dropped at the Radius server end because of a queue overflow or a Radius Server that is approaching its processing limit. When a server in the server group specified in the error message is responding, the %RADIUS-6-SERVERALIVE message will follow.

Error Message

%RADIUS-3-FORKFAIL: Failed to fork process for [chars].

Explanation The system has probably run out of memory.

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

Error Message

%RADIUS-3-FORMATLONG: Format string too long. Maximum allowed length is [dec].

Explanation The user has attempted to configure a format string with a prefix that is too long.

Recommended Action Enter a format string with a shorter prefix.

Error Message

%RADIUS-6-GETPOOLS: Retrieving IP-Pools via user [chars]

Explanation Initial IP pool definitions are being retrieved from RADIUS using the profile of the specified user.

Recommended Action No action is required.

Error Message

%RADIUS-6-GETROUTES: Retrieving static routes in user [chars]

Explanation Initial static routes are being retrieved from RADIUS using the profile of the specified user.

Recommended Action No action is required.

Error Message

%RADIUS-3-IDENTFAIL: Save of unique accounting ident aborted. Configuration has been modified.

Explanation Because the configuration has been modified, the user cannot save the unique accounting IDENT to NVRAM.

Recommended Action Save the configuration and try again. If the error persists, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RADIUS-6-IDENTSAVE: Saving config with new acct ident in nvram.

Explanation An accounting IDENT is being saved in NVRAM.

Recommended Action No action is required.

Error Message

%RADIUS-3-NOHOSTNAME: Failed to retrieve my hostname.

Explanation An attempt to find the host name of the router has failed. A host name must be defined because it determines the RADIUS profile to be retrieved.

Recommended Action Define a host name in the configuration of the router.

Error Message

%RADIUS-4-NOSERV: Warning: Server [IP_address]:[dec],[dec] is not defined.

Explanation The specified server is not on the master list. If it remains undefined, unexpected results may occur.

Recommended Action Define the server on the appropriate master list as soon as possible.

Error Message

%RADIUS-3-NOSERVERS: No Radius hosts configured.

Explanation RADIUS is attempting to send a request to a host, but no hosts are configured.

Recommended Action To configure a host, use the **radius-server** command.

Error Message

%RADIUS-3-OVERRUN: Insufficient buffer space [dec] for string value.

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RADIUS-3-PICKERR: Internal pick-server error: [chars]

Explanation RADIUS has encountered an internal consistency error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%RADIUS-3-SECRETDEFINEFAILED: Key definition ignored.`

Explanation The user is attempting to store either a corrupted shared secret or a memory allocation has failed during the secret definition. Any existing shared secret will be preserved.

Recommended Action Configure an appropriate secret.

Error Message

`%RADIUS-6-SERVERALIVE: Group [chars]: Radius server [IP_address]:[dec],[dec] is responding again (previously dead).`

Explanation A RADIUS group server in which all the servers were previously found dead has started responding again. This message follows the `%RADIUS-3-ALLDEADSERVER` command and shows that a server has become available after previously being unavailable.

Recommended Action No action is required.

Error Message

`%RADIUS-4-SERVREF: Warning: Server [IP_address]:[dec],[dec] is still referenced by server group.`

Explanation The server that is being removed is still referenced by a server group.

Recommended Action Remove the server reference from the server group as soon as possible.

RADIX Messages

The following are radix error messages.

Error Message

`%RADIX-3-ADDMASK: Error adding mask entry, [chars]`

Explanation A software or hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%RADIX-3-BADTREE: Invalid pointer to head of tree, [hex]`

Explanation A software programming error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%RADIX-3-DELETE: Error deleting trie entry, [chars]`

Explanation A software programming error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%RADIX-2-INIT: No memory for radix initialization: [chars]`

Explanation The system ran out of memory during initialization. This error should occur only if an image is too large for the existing dynamic memory.

Recommended Action Use a smaller subset image or upgrade the hardware.

Error Message

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

Explanation The system is out of memory.

Recommended Action To correct the problem, reduce the number of routes accepted by this router, upgrade the hardware, or use a smaller subset image on the run-from-RAM platforms.

Error Message

`%RADIX-4-ORPHAN: Orphaned mask [hex], refcount=[dec] at [hex], next=[hex]`

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

RAIKO Messages

The following are RAIKO-based feature board error messages.

Error Message

`%RAIKO-3-BAD_MGMT_INT_HNDLR_CB_REG: Slot [dec]: Mgmt int. handler's registration routine was passed NULL callback address(es) -- enabler=[hex], handler=[hex]; registering party's callback details ignored`

Explanation A management-level interrupt handler has been registered incorrectly with device-independent code. A software fix is required.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RAIKO-3-BRIDGE_PCI_ERROR: Slot [dec]:DFC [dec] ERROR [chars]
```

Explanation A PCI error has occurred during an attempt to access a DFC. The DFC has been shut down.

Recommended Action Replace the DFC.

Error Message

```
%RAIKO-3-DFC_ID_ZERO: Slot [dec]: id of DFC[int] is invalid (zero); cookie probably unprogrammed
```

Explanation When the cookie on the specified DFC was read for the ID of the DFC, an invalid value of 0 was returned. The invalid value indicates that the cookie on the DFC has not been programmed properly.

Recommended Action Reprogram the cookie on the DFC.

Error Message

```
%RAIKO-3-MGMT_INT_HNDLR_INST_FAILED: Slot [dec]: installation of desired Mgmt interrupt handler failed -- no routine is currently installed at IOS Level [dec]
```

Explanation An attempt to install the required management interrupt handler at the specified Cisco IOS level has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RAIKO-3-MGMT_INT_UNCLAIMED: Slot [dec]: a Mgmt interrupt occured but was not processed by a device-specific handler; following sources masked out: [chars]
```

Explanation A source of management-level interrupts does not have a handler registered for it. A software fix is needed to install the proper handler.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RAIKO-3-NO_MGMT_INT_HNDLR_CB_ENTRY: Slot [dec]: no free Mgmt int. handler callback entries (all [dec] in use); registering party's callback details dropped

Explanation More management interrupt handlers have registered than can be managed. A software fix is required.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RAIKO-3-UNEXPECTED_MGMT_INT_HNDLR: Slot [dec]: installation of Mgmt int. handler apparently failed -- routine currently installed at IOS Level [dec] is [hex]

Explanation An attempt to install the required management interrupt handler at the specified Cisco IOS level has failed because another handler was found there.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

RCMD Messages

The following are remote command error messages.

Error Message

%RCMD-4-RCMDDNSFAIL: DNS hostname/ip address mismatch. [IP_address] unknown to DNS

Explanation The IP address for an incoming remote command request is not registered with DNS.

Recommended Action Add the IP address to DNS.

Error Message

%RCMD-4-RCPATTEMPTED: Remote copy from [chars] at [chars] 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 from [chars] at [chars] denied

Explanation An attempt was made to connect to a router through the rsh protocol, 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 from [IP_address]

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.

Regen Messages

The following are Cisco optical regenerator error messages.

Error Message

%Regen-3-BADADDR: regen_little_endian_addr: Attempted conversion of invalid address ([hex])

Explanation A software error has occurred during an attempt to determine PCI device addressing. This condition is most likely to occur because of a software error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%Regen-3-BADADDR2: regen_big_endian_addr: Attempted conversion of invalid address ([hex])

Explanation A software error has occurred during an attempt to determine PCI device addressing. This condition is most likely to occur because of a software error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%Regen-3-BADBAYDEV: get_pci_dev_num: Invalid bay ([dec]) or device number offset ([dec])
```

Explanation A software error has occurred during an attempt to determine PCI device addressing. This condition is most likely to occur because of a software error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%Regen-3-BADDEVNO: pas_get_device_subunit: Invalid PCI device number: [dec]
```

Explanation A software error has occurred during an attempt to determine PCI device addressing. This condition is most likely to occur because of a software error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%Regen-3-BADNV: Detected invalid NVRAM size: [dec] bytes
```

Explanation The system has detected that the size of the NVRAM is not supported. The NVRAM may be bad.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%Regen-3-BADPA: Invalid Port Adaptor type ([dec]) reported for mainboard
```

Explanation The virtual port adapter type derived from the main board is not one of the supported types. The main board is a new main board type, and the software release that is running does not support the new main board type.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%Regen-3-BADPCIRD: PCI Configuration Read Cycle Failed for bus [dec], Device [dec], function [dec], register [dec]
```

Explanation A PCI bus configuration read cycle has failed.

Recommended Action The main board needs to be replaced. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%Regen-3-BADPCIWR: PCI Configuration Write Cycle Failed for bus [dec], Device [dec], function [dec], register [dec]
```

Explanation A PCI bus configuration write cycle has failed.

Recommended Action The main board needs to be replaced. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%Regen-3-NOMAC: Can't allocate MAC address for interface [int]/[int]
```

Explanation All the available MAC addresses for the system have been allocated.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%Regen-3-NVERASEFAIL: Failed to erase config due to internal error
```

Explanation The password protection feature has failed to erase the configuration because of an internal error.

Recommended Action If the error message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%Regen-1-OVERTEMP: System detected OVERTEMPERATURE condition. Putting the system in Power save mode and going to rommon. Please resolve cooling problem and restart system!

Explanation The environmental monitor has detected a high-temperature condition.

Recommended Action Ensure that the room temperature is not too high and that air flow to the card is not blocked. If this condition persists, the environmental monitor might shut down the system. If the message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Regen_MAINBOARD_ASYNC_PQUICC Messages

The following Cisco optical regenerator error messages relate to the Asynchronous MPC860 quad integrated communications controller.

Error Message

%Regen_MAINBOARD_ASYNC_PQUICC-3-NOMEMORY: No memory for [chars] of unit [dec]

Explanation The router does not have enough memory to perform the function.

Recommended Action Consider adding more shared memory. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

REGISTRY Messages

The following are registry error messages.

Error Message

%REGISTRY-3-STUB_CHK_OVERWRITE: Attempt made to overwrite a set stub function in [chars].

Explanation A single function can be set as a callback when a stub with check registry is invoked. This error message indicates that an attempt to set a new callback has failed because a callback function has already been set.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

RESOURCE_MON Messages

The following are resource monitor subsystem error messages.

Error Message

%RESOURCE_MON-1-INITSYS: [chars]

Explanation This error indicates an initialization failure. The specific message text is supplied by the Resource Monitor software. When this error occurs, the Resource Monitor subsystem is not operational.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RESOURCE_MON-1-RSCMON_BAD_DATA: [chars]

Explanation This error indicates that internal data was corrupted because of a software error. The specific message text is supplied by the Resource Monitor software.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%RESOURCE_MON-1-RSCMON_CLIENT_Q. : [chars]

Explanation This error indicates a memory exhaustion condition. The specific message text is supplied by the Resource Monitor software.

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

RESYNCH Messages

The following are RPM resynchronization process error messages.

Error Message

%RESYNCH-6-INFO: [chars]

Explanation The system has information to log.

Recommended Action No action is required.

Error Message

%RESYNCH-3-INVLD_IN_0: Invalid input to func [chars]: [chars] = NULL.

Explanation A function has been called with an invalid NULL value for an input parameter.

Recommended Action No action is required.

Error Message

%RESYNCH-3-INVLD_IN_D: Invalid input to func [chars]: [chars] = [dec].

Explanation A resynchronization function has been called with an invalid decimal value for an input.

Recommended Action No action is required.

Error Message

%RESYNCH-3-MEM_ALLOC_FAIL: Func [chars] could not alloc [dec] bytes for [chars].

Explanation A resynchronization function could not allocate the specified number of bytes for the specified variable.

Recommended Action No action is required.

Error Message

%RESYNCH-3-RET_ERROR: Func [chars] is returning an error because [chars].

Explanation A resynchronization function is returning an error because of the reason specified in this message.

Recommended Action No action is required.

Error Message

%RESYNCH-6-UPDATE_DELETE: Resynched connection [dec]/[dec] deleted.

Explanation The specified channel was resynched, and it was deleted from the controller.

Recommended Action No action is required.

Error Message

%RESYNCH-3-UPDATE_NAKED: Update for channel [dec] was NAKed.

Explanation The controller has sent a NAK in response to an update for the specified channel.

Recommended Action No action is required.

Error Message

%RESYNCH-6-UPDATE_OK: Resynched connection [dec]/[dec] re-added.

Explanation The specified channel has been resynched and re-added to the controller.

Recommended Action No action is required.

Error Message

%RESYNCH-3-UPD_RESP_UNKNOWN: Unknown update response [dec] for channel [dec].

Explanation The controller has responded with an unknown response for a channel.

Recommended Action No action is required.

Error Message

%RESYNCH-4-WARNING: [chars]

Explanation The system will log a warning.

Recommended Action No action is required.

RIP Messages

The following are IP IP Routing Information Protocol (RIP) error messages.

Error Message

%RIP-3-NOSOCKET: Unable to open socket

Explanation The requested operation could not be completed 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.

RLM Messages

The following are RLM error messages.

Error Message

```
%RLM-3-INIT: rlm [dec]: [chars][chars].
```

Explanation The RLM initialization operation has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RLM-4-LINK: rlm [dec]: [chars][chars].
```

Explanation A warning has been received for an RLM link. This message provides debugging information only.

Recommended Action No action is required.

Error Message

```
%RLM-4-NOBUF: rlm [dec]: cannot get packet buffer for [chars].
```

Explanation An RLM link cannot allocate a packet buffer.

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

RM Messages

The following are Resource Manager error messages.

Error Message

```
%RM-3-BADACCT: Unknown Accounting type ([dec]), flag ([dec]).
```

Explanation The system has received either an invalid accounting type or a flag.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RM-3-BADCALL: Unexpected Call on [chars]. Current state is [dec].

Explanation A call has been received on a line that the software still detects as being active.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RM-3-BADRG: Bad state rg "[chars]": [dec]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RM-3-BOUNDARY: Memory boundary violation

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RM-3-NORESP: No response-code from local RM

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RM-3-OUTOFBUFFS: Out of buffers in RM event buffer queue

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RM-3-RGINFO: [chars]: RG-info conversion failed ([int]).
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RM-3-WAVL: Wavl error
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RM-3-ZEROVAL: Uninitialized value being used
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

ROUTEMAP_IPC Messages

The following are route map interprocess communication (IPC) error messages.

Error Message

```
%ROUTEMAP_IPC-2-NOMEMORY: Alloc fail for route-map ipc buffer
```

Explanation The system is unable to allocate a memory buffer to send the route map configuration down to the line cards.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show chunks** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show chunks** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%ROUTEMAP_IPC-2-WRONGREQUEST: Invalid request to allocate chunk of size [dec]
```

Explanation An invalid chunk size allocation has been entered.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show chunks** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show chunks** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

RPA Messages

The following are Resource Pool Allocation (RPA) error messages.

Error Message

```
%RPA-3-FLEXIBLE: [chars]
```

Explanation This message is displayed for all error messages that use ASCII text and do not take any parameters.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RPA-3-NO_CAS_ENTRY: CAS Entry does not exist for slot: [dec], ctrl:[dec],  
channel:[dec]
```

Explanation The CAS entry did not exist for the given controller and channel.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RPA-3-UNKNOWN_MSG: Unknown message type [dec] enqueued to RPA CAS Process
```

Explanation A message type that is not known to the RPA CAS process has been placed in the queue.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

RPC Messages

The following are Remote Procedure Call(RPC) error messages.

Error Message

```
%RPC-2-APPNOTREG: Remote application '[chars]' not registered
```

Explanation The remote application has not registered itself with the RPC subsystem.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%RPC-4-BADID: Application ID [dec] is invalid
```

Explanation The application ID used by the RPC subsystem is invalid.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%RPC-4-DUPREG: Application '[chars]' is already registered
```

Explanation The application has already registered itself with the RPC subsystem.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%RPC-2-FAILED: Failed to send RPC request [chars]
```

Explanation A communication error has occurred during an RPC request.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%RPC-2-NOMEM: No memory available for [chars]

Explanation The RPC subsystem could not obtain the memory it required.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%RPC-2-NOSUCH: The referenced RPC application ([dec]) does not exist

Explanation A message was received for an RPC application that does not exist.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%RPC-2-NOTREADY: The referenced RPC application ([dec],[chars]) is not ready

Explanation A message was received for an RPC application that is not ready.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%RPC-4-TOOMANY: Too many RPC applications, '[chars]' not registered

Explanation Too many applications are registered with the RPC subsystem.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

RPM Messages

The following are Route Processor Module (RPM) error messages.

Error Message

```
%RPM-4-COOKIE: Corrupt or missing MAC address cookie using random base [enet]
```

Explanation The contents of the MAC address EEPROM are invalid. The system is providing random MAC addresses.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RPM-4-NOCPUVER: Invalid CPU ID, assuming revision 1
```

Explanation The CPU ID could not be read from the EEPROM. This error is probably caused by a hardware failure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RPM-3-NOMAC: Can't allocate MAC address for interface [int]/[int]
```

Explanation MAC address allocation failed because of an incorrect slot and port combination, which exceeds the maximum available hardware.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RPM-4-PCIVALID: PCI activation failed, bay [dec], [hex]
```

Explanation The system has received an invalid PCI signal from the port adapter. This error is probably caused by a hardware failure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

RP_MLP Messages

The following are Distributed Point-to-Point Protocol (PPP) Multilink error messages.

Error Message

`%RP_MLP-4-MISCONFIGLINK: Links spread across VIPs, cant add, giving control to RSP`

Explanation DMLP is giving control of a bundle to the RSP because DMLP cannot support the attempt to add links to this bundle, which has been spread across VIPs.

Recommended Action No action is required.

Error Message

`%RP_MLP-4-NODISTMLP: Failure downloading MLP bundle [chars] to the LC [dec]`

Explanation The bundle is configured to be distributed, but the MLP configuration cannot be downloaded to the line card.

Recommended Action No action is required.

Error Message

`%RP_MLP-4-PANOTSUPPORTED: Adding Link from unsupported PA, cant add, giving control to RSP`

Explanation An attempt to add links to a bundle from a port adapter that is not supported by DMLP has been made. DMLP is passing control of the bundle to the RSP.

Recommended Action No action is required.

RPM_VIRTUAL_PORT Messages

The following are Route Processor Module (RPM) virtual port error messages.

Error Message

`%RPM_VIRTUAL_PORT-3-CLRALLCNF_DELETE_FILE: ERROR: clrAllCnf --- Fail to delete clrAllCnf file on PXM C: disk ... Please delete file manually by doing "delete c:auto_config_slot[dec]".`

Explanation The reconfiguration request to the PXM has failed, timed out, or been rejected by the PXM.

Recommended Action In the case of failure or timeout, the state of the connection will be set to TIMEOUT, and the resynchronization process will periodically attempt to update the PXM. If the request was rejected by the PXM, the connection state will be set to FAILED until the connection is deleted or reconfigured.

Error Message

%RPM_VIRTUAL_PORT-3-CONNDEL: [chars]

Explanation The delete request to the PXM has failed, timed out, or been rejected by the PXM.

Recommended Action In the case of failure or timeout, the state of the connection will be set to TIMEOUT, and the resynchronization process will periodically attempt to update the PXM. If the request was rejected by the PXM, the connection state will be set to FAILED until the connection is deleted or reconfigured. If the request is rejected, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RPM_VIRTUAL_PORT-3-IPCERR: [chars] Error String = [chars]. Error Code = [dec]

Explanation The RPC/IPC request to the PXM has failed or has been rejected by the PXM.

Recommended Action If the error message indicates “rpc-timeout”, retry the command that was entered last. For other errors, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RPM_VIRTUAL_PORT-3-IPCPAK: [chars] Message size = [dec]

Explanation The ip_get_pak_message failed. This error was probably caused by insufficient memory.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RPM_VIRTUAL_PORT-3-IPCSIZE: [chars] Message size = [dec]

Explanation The message that is supposed to be sent to or received from the PXM is too big.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RPM_VIRTUAL_PORT-3-RPCREQERR: [chars] request_type = [dec]

Explanation The RPC request from the Virtual Port or Resync process is not valid.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RPM_VIRTUAL_PORT-3-VRTLERR: An unexpected FW error has occurred. [chars]

Explanation An unexpected firewall error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

RPS Messages

The following are redundant power system error messages.

Error Message

%RPS-3-DCOUTPUTVOLTFAIL: System detected Redundant Power System DC Output Voltage failure condition.

Explanation The redundant power system experienced a DC output voltage failure in one of the power supplies.

Recommended Action The redundant power supply has failed for one of the DC outputs. For redundant power supplies in Cisco 2600 and 3600 series routers, the “DC Status” LED on the front of the power supply identifies which DC output has failed. For redundant power supplies in the Cisco AS5300 universal access server, the “DC OK” LED on the front of the power supply identifies which DC output has failed. Replace the redundant power supply that has failed.

Error Message

%RPS-3-DCOUTPUTVOLTOK: Redundant Power System DC Output Voltage condition is now normal

Explanation The DC voltage is normal for the redundant power system.

Recommended Action No action is required.

Error Message

%RPS-3-FANFAIL: System detected Redundant Power System FAN FAIL condition.

Explanation The redundant power system has experienced a fan failure.

Recommended Action Replace the redundant power supply.

Error Message

%RPS-3-FANOK: Redundant Power System FAN condition is now normal.

Explanation The redundant power supply previously detected a fan failure condition that has now returned to a normal condition.

Recommended Action No action is required.

Error Message

`%RPS-3-INPUTVOLTFAIL: System detected Redundant Power System Input Voltage failure condition.`

Explanation The redundant power system has experienced an input voltage failure in one of the power supplies.

Recommended Action One of the AC or DC inputs has failed on the redundant power supply. For the redundant power supplies in the Cisco 2600 and 3600 series routers, the “AC Input” LED on the front of the power supply identifies which AC input has failed. For the redundant power supplies in the Cisco AS5300 universal access server, the “AC OK” LED on the front of the power supply identifies which AC input has failed. For the redundant power supplies in the Cisco AS5800 universal access server, the “DC Input” LED on the front of the power supply identifies which DC input has failed. Ensure that the AC/DC circuit in your building is operational, verify that the power cord is plugged into the redundant power supply, and ensure that the AC/DC power switch on the redundant power supply is on.

Error Message

`%RPS-3-INPUTVOLTOK: Redundant Power System Input Voltage condition is now normal`

Explanation The redundant power system input voltage is normal.

Recommended Action No action is required.

Error Message

`%RPS-3-MULTFAIL: There is more than one failure with the Redundant Power System; please resolve problems immediately`

Explanation The redundant power system has experienced multiple failures. This is a critical condition.

Recommended Action Examine the LEDs on the front of the Redundant Power Supply to find out which failure has occurred. Replace the redundant power supply that has failed.

Error Message

`%RPS-3-OVERTEMP_OK: System temperature is now normal.`

Explanation The system previously detected a high temperature condition that has now returned to a normal temperature condition. This condition might have been caused by high ambient temperature where the router is located.

Recommended Action No action is required.

Error Message

%RPS-3-OVERVOLT: Redundant Power System detected OVERVOLTAGE condition.

Explanation The Redundant Power System has detected an over voltage condition.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RPS-3-RPSOK: Redundant Power System is now normal

Explanation The redundant power system is operating normally.

Recommended Action No action is required.

Error Message

%RPS-3-THERMAL: System detected Redundant Power System THERMAL FAIL condition.

Explanation The redundant power system experienced either a fan failure or a high temperature condition.

Recommended Action For the redundant power supplies in the Cisco 2600 and 3600 series routers, look at the “FAN” and “TEMP” LEDs on the front of the power supply. If the “FAN” LED is amber, one of the fans has failed, and you should replace the redundant power supply. If the “TEMP” LED is amber, the ambient temperature is too high. For the redundant power supplies in the Cisco AS5300 universal access server, this error message is displayed when the ambient temperature is too high.

Error Message

%RPS-3-THERMOK: Redundant Power System THERMAL condition is now normal.

Explanation The redundant power system thermal condition is now normal. The redundant power supply previously detected a high temperature condition that has now returned to a normal temperature condition. This condition was probably caused by high ambient temperature where the redundant power supply is located. A redundant power system thermal failure can also be caused by a fan failure in the redundant power supply.

Recommended Action If this message recurs, pay close attention to the error messages that are displayed and to the LED indicators on the front of the power supply. No immediate action is required.

Error Message

%RPS-3-VOLTOK: Redundant Power System VOLTAGE is now normal.

Explanation The redundant power system voltage is now normal.

Recommended Action No action is required.

RSP Messages

The following are Route Switch Processor (RSP) error messages.

Error Message

```
%RSP-3-ACCERROR: [chars] acc [hex] had bad value [dec]
```

Explanation An incorrect value has been written on an accumulator.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information. A microcode reload can correct the error condition.

Error Message

```
%RSP-3-BADBUFHDR: [chars], address [hex]
```

Explanation A software or hardware error regarding the MEMD buffers has occurred; for example, a buffer header pointer might be invalid. The exact nature of the problem is described in the error message.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RSP-2-BADCACHE: Overrun detected. End of MEMD buffer : [hex] End of datagram :  
[hex] bufhdr [hex]: [hex] [hex] [hex] [hex] Flushing Processor Cache
```

Explanation A packet was processed that was greater in size than the MTU size possible, or an illegal buffer header data area was found.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RSP-3-BADHWREV: [chars] (slot [int]) has wrong hardware revision [int].[int]
```

Explanation The hardware in the indicated slot must be upgraded for operation with the RSP.

Recommended Action Upgrade the board.

Error Message

```
%RSP-3-BADTURBOIPCMSG: Bad Turbo IPC msg ([chars]): msg=[hex] lastmsg=[hex]  
hdrsize=[hex] size=[hex]
```

Explanation An error has been discovered in an IPC message.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RSP-4-COOKIE: Corrupt or missing MAC address cookie  
using random base [enet]
```

Explanation The MAC addresses that are allocated to this chassis could not be accessed or were found to be corrupt. This condition was caused by a hardware problem or manufacturing problem.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RSP-3-ERROR: [chars]
```

Explanation An internal software error has occurred. The exact nature of the problem is described in the error message.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RSP-3-FOREVER: cmd [int] to [chars] (slot [int]) took [int] usecs, done [hex]
```

Explanation A command from the RSP to an IP took longer than expected.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RSP-4-HSA_MEM: size mismatch, master [int]MB, slave [int]MB
```

Explanation The system has detected a memory size mismatch between a master and slave RSP.

Recommended Action Configure both master and slave RSPs to have an equal amount of memory.

Error Message

%RSP-4-HSA_MINMEM: [int]MB required for HSA

Explanation HSA requires a minimum of 24 MB of memory.

Recommended Action Upgrade your system to meet minimum memory requirements for HSA.

Error Message

%RSP-3-IDPROM: Bad or missing ID EEPROM, controller type [int]

Explanation The ID EEPROM on the RSP is missing or invalid. This condition might be caused by a manufacturing error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RSP-3-INVQPTR: queue=[hex], bufhdr [hex]: [hex] [hex] [hex] [hex]

Explanation A software or hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RSP-3-INVRTN: Invalid return queue next=[hex], hwidb=[hex], type=[hex]
queue_ptr=[hex], bufhdr_offset=[hex], id=[dec], bcast_id=[dec] bufhdr [hex]:
[hex] [hex] [hex] [hex]

Explanation A software or hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RSP-3-INVRTNBCASTID: Invalid return queue bcast_id=[dec] bufhdr [hex]: [hex]
[hex] [hex] [hex]

Explanation A software or hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RSP-3-IPC: [chars] [chars]

Explanation An IPC error has occurred. The exact nature of the problem is described in the error message.

Recommended Action Copy the router configuration, along with any other relevant information. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RSP-3-IP_PANIC: Panic: [chars] [hex] [hex] [hex] [hex]

Explanation Firmware for the interface processor has experienced a critical condition.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%RSP-3-LOVEGIANT: Card [chars] wants [dec] byte love letters, but only got [dec] bytes

Explanation An inconsistency between the microcode and the system code has been detected.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RSP-3-LOVENOTE: [hex] corrupt: [hex] [hex] [hex] [hex]

Explanation This message indicates miscommunication between the RSP and an IP.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RSP-3-MSDOG: Master/slave watchdog timed out

Explanation The system software failed to reset the master/slave watchdog timer, which caused the timer to time out. This condition might indicate a software problem or a hardware problem.

Recommended Action Copy the router configuration along with any other relevant information. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RSP-3-MSFIX: Fixing [chars] by setting to default [chars]

Explanation The characters shown can be either on the slave RSP setting or on the master RSP setting. The ROM monitor default slave RSP setting is not synchronized with the system configuration file specifications. During bootup, the system image detects the mismatch and modifies the ROM monitor setting to conform to these specifications. This mismatch has most likely occurred because a new RSP was being installed and booted in an HSA environment (dual RSPs) for the first time. Alternatively, in established HSA configurations, this message might result from a previous IPC error that occurred while the HSA environment was being reconfigured.

Recommended Action Perform the following steps:

1. Determine which slot contains the current slave RSP by entering the **show version** or **show boot** command.
2. Determine which slot has been specified as the default slave RSP by entering the **show configuration** command. If there is no **slave default-slot n** command in the configuration file, the value defaults to the highest numbered CPU slot (slot 3 on a Cisco 7507 RSP, and slot 7 on a Cisco 7513).

If the slot number obtained in step 1 is the same as the number obtained in step 2, then no further action is required. You have configured HSA in simple hardware backup mode, and both RSPs are identical. However, if the two slot numbers differ, you have configured HSA in software error protection mode, and you will have different images running, depending on which RSP is currently the slave RSP.

If the slot numbers discovered in steps 1 and 2 differ, reload the router image to ensure that the desired system image is running. After the reload, the actual slave RSP will match the default slave RSP in the system configuration file.

For details about various HSA configuration modes, refer to the *Cisco IOS Configuration Fundamentals Configuration Guide*.

Error Message

%RSP-3-MSVERS: Master has m/s version [dec], slave has m/s version [dec]

Explanation The master and slave are running software versions that are incompatible with the master/slave exchange process.

Recommended Action If the slave image global configuration is used to override the default slave image from the bundle, the slave image is incompatible. Update either the master or slave image to ensure that the two are compatible. If the slave is running the image from the bundle, enter and record the output of the **show version**, **show running-config**, and **show controller cbus** commands. Report this information and the error message to your Cisco technical support representative.

Error Message

```
%RSP-3-NOIDB: bad vc [int] on [chars]
```

Explanation A channelized interface driver received a packet on an unconfigured channel.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%RSP-3-NOMAC: Can't allocate MAC address for interface [int]/[int]
```

Explanation No MAC address was available for allocation to the specified interface.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RSP-2-NOMEMORY: No memory available for [chars]
```

Explanation An attempt to allocate memory has failed.

Recommended Action Try one or more of the following actions:

- Add memory.
- Disable some features.
- Apply filtering to decrease the size of system data structures (for example, the routing table).
- Reduce other system activities in general to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

```
%RSP-3-NORESTART: [chars]: unable to schedule restart for output queue
```

Explanation A software or hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RSP-3-NOSTART: No microcode for [chars] card, slot [int]
```

Explanation No microcode is defined or available for the specified card.

Recommended Action Reconfigure the card to specify an existing microcode file.

Error Message

```
%RSP-2-QADIAG: QA Diagnostic [chars] error at [hex]
```

Explanation An error occurred during an attempt to access the RSP.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RSP-2-QAERROR: [chars] error, [chars] at addr [hex] ([chars])  
log [hex], data [hex] [hex]
```

Explanation A hardware error has occurred. The message will specify the buffer header address and queue pointer that were the cause of the failure. The most likely cause of this problem is a defective RSP (either master or slave), or a defective card.

Recommended Action If you have spare parts, try to swap the RSP or the cards to identify the faulty board. If you do not have any spare parts, or if you could not locate the defective card, contact your Cisco technical support representative with the detailed QAERROR diagnostic messages. This present message will be followed a list of QADIAG messages that give the number of elements in each hardware queue and duplicate buffer headers. A block of DMPMEM messages follow, which dump the buffer contents. Then another list of QADIAG messages will give information about the various queues of the interfaces present in the router. Provide all this information, along with the output of the **show tech-support** command, to your Cisco technical support representative.

Error Message

```
%RSP-3-RESTART: [chars]
```

Explanation The cBus buffer memory has been reset and reallocated. The exact nature of the problem is described in the error message.

Recommended Action Report this error to your Cisco technical support representative if memory is not reset manually (for example, by changing the MTU on an interface).

Error Message

```
%RSP-4-RSPDRAM: Insufficient DRAM to adequately run this IOS version. [dec]M is  
recommended.
```

Explanation The quantity of DRAM for the RSP is lower than the recommended amount.

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

Error Message

```
%RSP-3-SLAVECHANGE: Slave changed state from [chars] to [chars]
```

Explanation The slave RSP has undergone a hardware state change. Both the old state and new state are shown. Possible state changes indicated by the above message are the following: any to unplugged, unplugged to nonparticipant, slave nonparticipant to slave, or slave to nonparticipant. Any other combination is unexpected.

Recommended Action If the slave RSP has been removed, consider reinstalling the RSP if continued HSA operation is required. If the RSP is present, ensure that the slave RSP is properly seated in the card cage. If a slave RSP was installed, configure the router for HSA. Refer to the chapter “Loading System Images and Configuration Files” (Cisco 7500 series only) in the *Cisco IOS Configuration Fundamentals Configuration Guide* for more details. In particular, use the **slave sync config** command to ensure that the new slave RSP is configured consistently with the current master RSP.

**Caution**

Failure to ensure a consistent configuration on a freshly installed slave RSP might result in undefined behavior if the router reloads.

Possibly, a previously crashed slave RSP was reset, or a newly installed slave RSP is in transition from unplugged to nonparticipant, and finally to slave state. In this case, no action is required. The slave RSP image has crashed. Log in to the slave RSP console using the **if-console slot** command. You will now be connected to the ROM monitor prompt on the slave RSP. Diagnose the slave RSP failure (for example, capture the output from the stack and context ROM monitor commands). Provide that information to your Cisco technical support representative with the router configuration and any other relevant information so that the problem can be investigated. Log out from the slave route RSP console port using a Ctrl-c or Ctrl-z key sequence, and enter the slave reload command in global configuration mode on the master RSP to bring the slave RSP back online. All other state changes indicate a software or hardware error.

Error Message

```
%RSP-3-SLAVECOPYFAILED: Copy of [chars] failed, ([chars]).
```

Explanation The copy of the file sent to the slave has failed.

Recommended Action Ensure that the corresponding slave device exists and has available memory.

Error Message

```
%RSP-3-SLAVEMASTER: Slave stole mastership
```

Explanation The master RSP has detected that the slave RSP configuration has been changed from slave to master. The old master RSP will reload and become the slave RSP, which allows the new master RSP take over. This behavior indicates a software or hardware error.

Recommended Action Copy the router configuration along with any other relevant information. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RSP-4-SLAVENOTUPDATED: Slave configuration not updated for [chars].

Explanation The configuration on the slave RSP cannot be synchronized with the master RSP.

Recommended Action Ensure that the **slave auto-sync config** command has been entered to configure the slave RSP and that the slave RSP is active.

Error Message

%RSP-3-SLAVE_NVRAM_BUSY: Slave NVRAM is temporarily busy

Explanation Another process is temporarily locking the slave configuration.

Recommended Action Retry the command that caused the error message. If this message recurs, check for other EXEC processes by entering the **show users** command. If no other users are locking the slave NVRAM, contact your Cisco technical support representative for assistance.

Error Message

%RSP-5-SLAVEUP: Slave changed to state Running

Explanation The slave RSP has started running the slave RSP image. This message appears after the user enters the **router boots** or **slave reload** commands in global configuration mode on the master RSP.

Recommended Action No action is required.

Error Message

%RSP-2-STALL: partially inserted or removed IPs on cyBus[int]

Explanation This condition might occur if a board is not correctly seated in the chassis. This condition could also be caused by a hardware problem with the RSP or backplane. The second condition is unlikely to occur.

Recommended Action Try reseating the boards. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RSP-3-XBUFHDR: corrupt bufhdr [hex]: [hex] [hex] [hex] [hex]

Explanation A miscommunication occurred between the RSP and an IP.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

RSRB Messages

The following are remote source-route bridging error messages.

Error Message

```
%RSRB-4-BADLEN: Peer [chars], [chars], bad length [dec], trn [dec]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RSRB-4-BADLENIP: Peer [dec]/[IP_address], [chars], bad length [dec], trn [dec]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RSRB-3-BADVERSIONFST: FSTin: [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. This condition might occur if the local end, the remote end, or both ends are not up to date.

Recommended Action Contact your Cisco technical support representative to obtain an update.

Error Message

```
%RSRB-3-BADVERSIONIF: IFin: [chars]: version mismatch, mine [dec], theirs [dec]
```

Explanation The remote end of a direct serial peer is running the wrong version of the system software. This condition might occur if the local end, the remote end, or both ends are not current.

Recommended Action Contact your Cisco technical support representative to obtain an update.

Error Message

```
%RSRB-3-BADVERSIONTCP: [chars]: [dec]/[IP_address]: version mismatch, mine [dec], theirs [dec]
```

Explanation The remote end of a TCP remote peer is running the wrong version of the system software. This condition might occur if the local end, the remote end, or both ends are not up to date.

Recommended Action Contact your Cisco technical support representative to obtain an update.

Error Message

```
%RSRB-4-BADVRE: Bad vre type
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RSRB-4-CONIPST: Peer [dec]/[IP_address], CONN, illegal state [dec]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RSRB-4-CONNILLSTATE: Peer [chars], CONN, illegal state [dec]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RSRB-4-CONNSTAT: Peer [chars], IFin, bad connection state [dec]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RSRB-3-FSTERR: [chars]: [chars]: [IP_address], 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 [IP_address], HDR, no vrp
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RSRB-4-HDRRECV: Peer [dec]/[IP_address], HDR, rcv state invalid, not empty [dec]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%RSRB-3-HDRVRP: Peer [dec]/[IP_address], HDR, vrp state wrong, [dec]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

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]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RSRB-4-LOCAL: Unit [dec], local/vring set simultaneously, vrn [dec]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RSRB-3-NOMEMORY: Unit [dec], no memory for [chars]

Explanation The requested operation could not be completed 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

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RSRB-4-OPTNULL: Remopened and t NULL

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RSRB-4-PEERSTAT: Peer [chars], wrong state [dec]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RSRB-4-RNGXFAIL: Ring exchange failure, resetting peer: [chars]

Explanation The RSRB peer initiation logic has failed because of a memory shortage or a congestion condition.

Recommended Action No action is required. The problem should clear, and the peers should reopen without operator intervention.

Error Message

%RSRB-3-SENDPUNTFST: [chars]: sent [chars] to [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.

Error Message

%RSRB-3-SENDPUNTIF: [chars]: sent [chars] to [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.

RS_TDM Messages

The following are router shelf time-division multiplexing (TDM) error messages.

Error Message

%RS_TDM-3-TDM_BACKPLANE_CLASH: Clash in usage for TDM backplane timeslot [dec]

Explanation The TDM backplane time slot to be allocated is already in use.

Recommended Action Check the split dial shelf settings on both router shelves for conflicting settings.

Error Message

%RS_TDM-3-TDM_CONFLICT: TDM split user setting are in conflict: my RS [chars] = [dec], other RS [chars] = [dec]

Explanation The user setting for the TDM split on this router shelf is in conflict with the setting on the other router. More backplane DS0 settings are in use than the allowed maximum of 2048 DS0s.

Recommended Action Set the other router dial shelf split backplane DS0 to another setting within the range.

Error Message

%RS_TDM-3-TDM_EXTEND_CLASH: TDM extended split on Router shelf Clashes to my [chars] other [chars] extended backplane ds0

Explanation The TDM extended split backplane DS0 for this router conflicts with the extended backplane DS0 of another router shelf.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RS_TDM-3-TDM_LEG_CLASH: TDM legacy split on Router shelf Clashes to my [dec] other [dec] legacy backplane ds0

Explanation The number of legacy backplane DS0s for the specified router shelf conflicts with the number of legacy backplane DS0s on the other specified router shelf.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RS_TDM-3-TDM_NOT_SPLIT_PAIR: TDM split user setting are not matched pairs my RS [chars] = [dec] ds0, expected other RS [chars] = [dec] ds0, actual other RS [chars] = [dec] ds0

Explanation The user setting for the TDM split on the specified router shelf is not compatible with the TDM split setting on the other specified router shelf.

Recommended Action Set the other router dial shelf split backplane DS0 to the same setting.

Error Message

%RS_TDM-3-TDM_REDUCED_TDM_SPLIT: TDM split on [chars] Router shelf Reduced to [dec] backplane ds0

Explanation The number of backplane DS0s for this router has been forced to a lower number.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%RS_TDM-3-TDM_UNKNOWN_TS_STATE: TDM backplane timeslot [dec] is in an unknown state

Explanation The specified TDM backplane time slot is in an unknown state.

Recommended Action Check the split dial shelf settings on both router shelves for conflicting settings.

RTT Messages

The following are Round Trip Time monitor error messages.

Error Message

```
%RTT-3-BadLoc: %RTR: should not have reached rttmon_config_entry_command
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%RTT-3-BufferInitFailed: RTR: Initialization of buffers failed!
```

Explanation The RTTMON process could not be started because of a low-memory condition.

Recommended Action Reduce the usage of resources in the configuration to resolve the memory shortage. After the memory shortage is resolved in the configuration, the system must be restarted because this error occurred during system initialization. Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

```
%RTT-3-GlobalInitFailed: RTR 0: [chars] - Failed to initialize local storage
```

Explanation The RTTMON process could not be started because of a low-memory condition.

Recommended Action Reduce the usage of resources in the configuration to resolve the memory shortage. After the memory shortage is resolved in the configuration, the system must be restarted because this error occurred during system initialization. Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

```
%RTT-3-MissingEchoStruct: %RTR: failed to get EchoAdmin Struct
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%RTT-3-MissingInit: %RTR: required initialization failed, thus cannot configure`

Explanation Configuration of the RTTMON has failed because of the previously reported memory shortage.

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

Error Message

`%RTT-3-SemaphoreInitFailed: RTR: Initialization of rttMonConfigSemaphore failed!`

Explanation The RTTMON process could not be started because of a low-memory condition.

Recommended Action Reduce the use of resources in the configuration to resolve the memory shortage. After the memory shortage is resolved in the configuration, the system must be restarted because this error occurred during system initialization. Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

RUDP Messages

The following are RUDP error messages.

Error Message

`%RUDP-3-INIT: rudp [dec]: [chars][chars].`

Explanation RUDP initialization has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%RUDP-4-LINK: rudp [dec]: [chars][chars].`

Explanation A warning has been provided for a specific RUDP link.

Recommended Action No action is required.

Error Message

`%RUDP-4-NOBUF: rudp [dec]: cannot get packet buffer for [chars].`

Explanation An RUDP link cannot allocate a packet buffer.

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

S4T68360 Messages

The following are four-port synchronous serial adapter based on the 68360 processor error messages.

Error Message

```
%S4T68360-1-DWNLDCKSM: Failed for bay [dec], sent = [hex], received = [hex]
```

Explanation When the internal firmware is downloaded to the S4T68360, a system firmware verification revealed an invalid checksum. This condition might indicate a hardware failure of the S4T68360 or the VIP.

Recommended Action Power down and restart the system. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%S4T68360-1-DWNLDFAIL: Microcode to port adaptor in bay [dec]
```

Explanation The S4T68360 hardware has failed. It could not download the operational microcode.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%S4T68360-1-INITFAIL: Bay [dec]: [chars]
```

Explanation The S4T68360 port adapter has failed to complete the hardware initialization.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%S4T68360-3-MBXREAD: Bay [dec] stale msg [chars]- mbx0:[hex], mbx1:[hex],  
mbx2:[hex]
```

Explanation The S4T68360 has not responded to a message from the VIP within a specified time frame.

Recommended Action Perform a microcode reload for the VIP. If this problem recurs, it might indicate that the S4T68360 or VIP hardware has failed.

Error Message

%S4T68360-1-NOTCMPLT: Microcode download to bay [dec] failed

Explanation The S4T68360 port adapter hardware has failed. The system was unable to acknowledge the completion of the operational microcode download.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%S4T68360-1-NOTREADY: Bay [dec] for microcode download

Explanation The S4T68360 port adapter hardware has failed. The S4T68360 port adapter could not download the operational microcode.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%S4T68360-3-NOTS4T68360: Bay [dec] device ID seen as [hex], expected [hex]

Explanation The S4T68360 hardware has failed. A non-S4T68360 device is pointed at the S4T68360 software.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%S4T68360-3-OWNERR: [chars] packet buffer, pak=[hex]

Explanation A software or hardware error has occurred. The S4T68360 driver has detected that the transmit ring is in an inconsistent and unrecoverable state.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%S4T68360-3-PANIC: Bay [dec], Exception [dec], trace [dec]

Explanation The S4T68360 firmware has detected an unexpected CPU exception or condition. This condition might be caused by a software error or by a hardware failure.

Recommended Action Perform a microcode reload of the VIP. If the problem persists, it might indicate that the S4T68360 hardware has failed.

Error Message

%S4T68360-1-RESTART: Bay [dec] port adaptor

Explanation The S4T68360 port adaptor hardware has failed. The periodic check routine detected the failure and restarted it.

Recommended Action No action is required.

Error Message

%S4T68360-5-RINGSIZE: [chars] TX packet dropped; particle count ([dec]) exceeds [dec]

Explanation A TX packet has been dropped because the TX ring was full. This condition normally occurs when the port adapter is overdriven.

Recommended Action No action is required.

Error Message

%S4T68360-1-STARTFAIL: [chars] [chars]

Explanation A software or hardware error has occurred. The S4T68360 interface is not responding to initialization commands.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%S4T68360-1-STOPFAIL: [chars] [chars]

Explanation The S4T68360 port adaptor has failed to respond to a request to disable an interface.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SARMGR Messages

The following are SARMGR error messages.

Error Message

%SARMGR-1-ANALYZE1575FAILED: The 1575 device analysis failed

Explanation The SARMGR has failed to initialize.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SARMGR-3-NOTNRPSARMGRDEV: Device reported [hex]

Explanation The PCI device ID was incorrect.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SCCP Messages

The following are SCCP error messages.

Error Message

%SCCP-1-ALERT: [chars]

Explanation A condition has occurred that should be corrected immediately.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCCP-2-CRITICAL: [chars]

Explanation A critical condition has occurred that should be corrected immediately.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCCP-3-ERROR: [chars]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCCP-6-INFO: [chars]

Explanation This is an informational message only.

Recommended Action No action is required.

Error Message

%SCCP-5-NOTICE: [chars]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCCP-0-PANIC: [chars]

Explanation An unrecoverable internal panic event has occurred that should be resolved immediately.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCCP-4-WARNING: [chars]

Explanation A warning message has been received.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SCHED Messages

The following are scheduler error messages.

Error Message

%SCHED-2-ATTRCMD: Attempt to [chars] attribute [chars] on process [dec].

Explanation An attempt has been made to set or get a private attribute that belongs to another process.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-2-ATTRVALUE: Attempt to set bad [chars] value ([hex]) on process [dec]

Explanation An attempt has been made to set the specified attribute for a process to an invalid value.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-3-CORRUPT: Scheduler '[chars]' corrupted by process [chars] (expected [hex], found [hex])

Explanation The scheduler has determined that its data structures were corrupted during the execution of the current process. This corruption is the result of a process action (multiple errors reported against the same process) or an interrupt driver (multiple errors reported against different processes).

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-2-EDISMSCRIT: Critical/high priority process [chars] may not dismiss.

Explanation Each process executes at a specified priority level. Higher priority processes must use the new scheduler primitives, although lower priority processes can use primitives from either the new or old scheduler. A higher priority process attempted to use an old scheduler primitive.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-3-INTSETWAKEUP: Invalid scheduler action ([chars]) at interrupt level

Explanation A process_set_wakeup_reasons has been attempted from an interrupt handler.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-3-LOSTWAKEUP: Wakeup information for process [chars] lost (maj [hex], min [hex]).

Explanation A process can register to be notified when various events occur in the router. An event for the specified process has been lost, and the router might not be functioning correctly.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-2-MESSAGE: Key ([chars]) does not match key ([chars]) of process ([dec]) in process_send_message request

Explanation An attempt has been made to send a message to a process. The key associated with the process did not match the key in the message. This condition occurs when an incorrect process id is used in the send message request.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-2-NOATTR: Attempt to [chars] unknown process attribute [dec].

Explanation An attempt has been made to set or get a nonexistent process attribute.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-2-NOTWATCHTIMER: [chars] timer [hex] not being watched.

Explanation A process can register to be notified when various events occur in the router. An attempt has been made to deregister a timer expiration event that is not currently registered.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-3-PAGEZERO: Low memory modified by [chars] ([hex] = [hex])

Explanation In all Cisco products, the first 256 bytes of memory are not used, and this area of memory is off limits. Newer platforms have hardware to immediately trap reads or writes to this area. Older platforms periodically check this memory. This message appears only on older platforms and indicates that this off-limits memory area has been modified.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-3-PRIORITY: Illegal priority ([dec]) specified for process [chars].

Explanation Each process executes at a specified priority level. Higher priority processes must use the new scheduler primitives, although lower priority processes can use primitives from either the new or old scheduler. An attempt has been made to set the specified process to a priority level that is not allowed for the type of scheduler primitives being used.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-2-QUEUENOTEMPTY: Attempt to delete non-empty watched queue [chars] (address [hex]).

Explanation A process can register to be notified when various events occur in the router. An attempt has been made to destroy a queue that still contained items. These items are lost and not returned to free memory.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-2-SEMNOTLOCKED: [chars] attempted to unlock an unlocked semaphore

Explanation Some sections of code use semaphores to protect critical sections of software. An attempt was made to unlock a semaphore that was not locked.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-2-SEMUNLOCK: [chars] attempted to unlock semaphore owned by [chars].

Explanation Some sections of code use semaphores to protect critical sections of software. An attempt has been made to unlock a semaphore that was not owned by the process attempting to unlock it.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-2-SETHIGHORCRIT: Attempt to set [chars] priority on process [dec] ([chars])

Explanation Each process executes at a specified priority level. Higher priority processes must use the new scheduler primitives, although lower priority processes can use primitives from either the new or old scheduler. An attempt has been made to set the specified priority too high for a process using old scheduler primitives.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-3-STACKSIZE: Illegal stack size ([dec]) specified for process [chars].

Explanation Each process has its own stack space that must be one of several predefined sizes. An attempt has been made to specify an illegal stack size.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-3-STILLWATCHING: Process still watching [chars] [chars]

Explanation A process can register to be notified when various events occur in the router. A process destroyed a set of events without first individually removing each event in the set.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-3-STILLWATCHINGT: Process still watching [chars] timer [hex]

Explanation A process can register to be notified when various events occur in the router. A process destroyed a set of events without first individually removing each event in the set.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-3-STUCKMTMR: Sleep with expired managed timer [hex], time [time-stamp] ([time-stamp] ago).

Explanation A process can register to be notified when various events occur in the router. A registered timer has expired, and the timer value has remained unchanged after the process has been executed two successive times. This message indicates a software failure that does not impact the functionality of the router.

Recommended Action No action is required; however, to take advantage of recent fixes, upgrade your system to the latest Cisco IOS software release in your release train.

Error Message

%SCHED-3-STUCKTMR: Sleep with expired timer [hex], time [time-stamp] ([time-stamp] ago).

Explanation A process can register to be notified when various events occur in the router. A registered timer has expired, and the timer value has remained unchanged after the process has been executed two successive times. This message indicates a software failure that does not impact the functionality of the router.

Recommended Action No action is required; however, to take advantage of recent fixes, upgrade your system to the latest Cisco IOS software release in your release train.

Error Message

%SCHED-3-THRASHING: Process thrashing on watched [chars].

Explanation A process can register to be notified when various events occur in the router. The process has taken and released control of the processor 50 consecutive times, and not all outstanding events were processed. The systems will recover, and the functionality of the router is not affected.

Recommended Action If this message recurs, this error may be caused by a software failure. Note that these messages are not always caused by software failures but may be issued in response to either instantaneous or sustained demand on the router. Increased or persistent messages may indicate that the traffic load should be reviewed. If the router does not seem to be overloaded, consider upgrading your system to the latest Cisco IOS software release in your release train to take advantage of recent fixes. If the problem persists, copy the error message text exactly as it appears on the console or in the system log, enter the **show log**, **show tech-support**, and **show proc cpu** commands, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-3-UNEXPECTEDEVENT: Process received unknown event (maj [hex], min [hex]).

Explanation A process can register to be notified when various events occur in the router. A process has received an event that it did not know how to handle. This message may be caused by a problem with the process receiving the event or with another process that has passed event numbers to the wrong process. This message indicates a software failure.

Recommended Action To take advantage of recent fixes, upgrade your system to the latest Cisco IOS software release in your release train. If the problem persists, copy the error message text exactly as it appears on the console or in the system log, enter the **show tech-support**, **show log** and **show process** commands, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-3-UNEXPECTEDMESSAGE: Unknown message [hex] received (ptr arg [hex], num arg [hex]).

Explanation A process can register to be notified when various events occur in the router. A process has received a message from another process that the process was unable to handle. This message may be caused by a problem with the process receiving this message, or with the other process passing a message to the wrong process. This message indicates a software failure.

Recommended Action To take advantage of recent fixes, upgrade your system to the latest Cisco IOS software release in your release train. If this problem persists, copy the error message text exactly as it appears on the console or in the system log, enter the **show tech-support**, **show log**, and **show process** commands, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-3-UNEXPECTEDQUEUE: Queue event for unknown queue (index [dec]).

Explanation A process can register to be notified when various events occur in the router. A process has received a queueing event for an unknown queue. This message indicates a software failure.

Recommended Action To take advantage of recent fixes, upgrade your system to the latest Cisco IOS software release in your release train. If the problem persists, copy the error message text exactly as it appears on the console or in the system log, enter the **show tech-support**, **show log**, and **show process** commands, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-3-UNEXPECTEDTIMER: Unknown timer expiration, timer = [hex], type [dec].

Explanation A process can register to be notified when various events occur in the router. A process has received a timer expiration event for an unknown timer. This message indicates a software failure.

Recommended Action To take advantage of recent fixes, upgrade your system to the latest Cisco IOS software release in your release train. If the problem persists, copy the error message text exactly as it appears on the console or in the system log, enter the **show tech-support**, **show log**, and **show process** commands, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCHED-2-WATCH: Attempt to [chars] uninitialized watched [chars] (address [hex]).

Explanation An internal software failure has occurred.

Recommended Action If this message appeared during an OIR of a card, no action is required. If this message occurred during normal operation, this message indicates a software failure. To take advantage of recent fixes, upgrade your system to the latest Cisco IOS software release in your release train. If the problem persists, copy the error message text exactly as it appears on the console or in the system log, enter the **show log** and **show tech-support** commands, contact your Cisco technical support representative, and provide the representative with the gathered information.

SCP Messages

The following are downstream physical unit (DSPU) error messages.

Error Message

%SCP-3-BADVLAN: Rx'd VLAN [dec] (opcode [hex]) from the NMP which is not configured.

Explanation The NMP sent a configuration command for an unconfigured VLAN interface.

Recommended Action Configure the VLAN interface.

Error Message

%SCP-4-DACK_TIMEOUT_MSG: SCP delivery ack timeout for opcode=[hex]

Explanation The RP did not receive SCP delivery acknowledgment from the SP after two retries.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%SCP-4-GET_PAK_MSG: Failed for message size=[dec]

Explanation The system is out of pak type buffers of the required size.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%SCP-2-NOMEM: No memory available for [chars]

Explanation The SCP protocol subsystem could not obtain the memory it needed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%SCP-3-NOPROC: Cannot create SCP process.

Explanation The system does not have sufficient internal resources available to create the queue.

Recommended Action Check available memory capacity on the router. Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

%SCP-3-NOQUEUE: Cannot create SCP Rx/Tx queue.

Explanation The system does not have sufficient internal resources available to create the queue.

Recommended Action Check available memory capacity on router. Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

%SCP-2-NOTREG: Process [dec]([chars]) not registered for SCP

Explanation The SCP application cannot send an SCP message because the application has not registered for a SAP.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%SCP-3-PROCEXIT: The SCP process is terminating. signal: [dec]. subcode: [dec].
addr: [hex].

Explanation The SCP process has been terminated.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SCP-2-TOO_MANY_SAP: Not enough space to register process [dec]([chars]) for SCP

Explanation The SCP application cannot register for a SAP because all possible numbers have been assigned.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%SCP-3-UNKMSG: Unknown SCP message (opcode [hex]) received.

Explanation The remote peer has sent an unknown SCP message.

Recommended Action Check software compatibility between the peers.

SDLC Messages

The following are Synchronous Data Link Control (SDLC) error messages.

Error Message

%SDLC-4-BADFRAME: [chars], Received bad SDLC [chars]frame, address [hex], control [hex]

Explanation A hardware or software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SDLC-3-CONFIGERR: [chars], addr [hex], Sent SNRM, received SNRM. Check link station roles.

Explanation A hardware or software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation A bad SDLC frame has been received.

Recommended Action If this message recurs, check the SDLC serial line and the devices attached to the line.

Error Message

%SDLC-3-DLU_ERROR: [chars], DLU failed to close station [hex] before re-opening, [chars]/[chars]

Explanation A hardware or software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SDLC-4-DROPPED: Dropped SDLC packet from SDLC hold queue

Explanation An SDLC frame had to be dropped from the output hold queue. This condition can occur when there is excessive congestion on the output link.

Recommended Action If this message occurs frequently, determine why the SDLC link is being overloaded with data and resolve the cause. This condition can usually be resolved either by increasing bandwidth to the SDLC line or reducing the load on the link.

Error Message

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

Explanation A FRMR frame has been received. This error can be caused by 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 the line.

Error Message

%SDLC-2-ILLEGSTATE: [chars], illegal state for addr [hex], [chars]([dec])

Explanation An internal SDLC state violation has been detected.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

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

Explanation An invalid SDLC frame has been received.

Recommended Action If this message recurs, check the SDLC serial line and the devices attached to the line.

Error Message

%SDLC-4-INVLDGRPCFG: Interface [chars], ignoring group-poll mismatch, UPOLL [hex]

Explanation A hardware or software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SDLC-5-INVLDGRPPOLL: Interface [chars], not configured for group-poll frame, received [hex]

Explanation A UP was received with the wrong group poll address.

Recommended Action Ensure that the group poll address that is configured on the router matches the group poll address that is configured in the PU macro (GP3174=XX) in the NCP generate file.

Error Message

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

Explanation An invalid SDLC frame has been received.

Recommended Action If this message recurs, check the SDLC serial line and the devices attached to the line.

Error Message

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

Explanation An information frame has been received from the remote end of the SDLC link that was larger than the N1 parameter on this link allowed.

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 that is sent by the remote end of the link.

Error Message

%SDLC-3-NOINPIDB: Input idb not set

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

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%SDLC-2-NOMEMORY: No memory available: [chars]

Explanation The requested operation has 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

%SDLC-2-NOPOINTER: AW_SDLC_SEC with no sdllc_llc pointer.

Explanation An error condition has occurred during an SDLLC initiation.

Recommended Action No action is required. The SDLLC session will restart without operator intervention.

Error Message

%SDLC-4-NOUA: [chars], addr [hex] received command [hex] in response to SNRM, expected UA

Explanation The router has received a frame other than a UA in response to a SNRM.

Recommended Action Check the end station to see if the SNA stack is up and running.

Error Message

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

Explanation An internal software error has occurred in the SDLC processing system.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%SDLC-4-SDLC_ERR: SDLC_ERROR with no poll

Explanation A protocol error has been detected on a secondary station, but FRMR could not be sent because the station did not own the poll bit. This condition might occur because of poor line conditions or a faulty SDLC implementation.

Recommended Action If this message recurs, run traces on the SDLC line. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SDLC-6-XID_DISPLAY: sa [enet] da [enet] ss [hex] ds [hex] [[hex][hex][hex][hex]]

Explanation This message supplies the information for the received and rejected XID.

Recommended Action This is a security feature. The additional information is displayed to help trace the source of the rejected XID. If the message is undesirable, simply remove the XID statement from the router configuration.

Error Message

%SDLC-6-XID_FORMAT: Unsupported XID format received, format [dec]

Explanation An inappropriate XID format has been received for this mode of SDLLC operation. Review the type of devices you are connecting with SDLLC to ensure that they are supported.

Recommended Action This is a security feature. The additional information is displayed to help trace the source of the rejected XID. If the message is undesirable, simply remove the XID statement from the router configuration.

Error Message

%SDLC-4-XID_NOMATCH: [chars], XID mismatch for [hex]. CONNECTION REJECTED

Explanation An inbound XID from a PU 2.0/PU 2.1 node has been rejected. The targeted SDLC address is displayed. The targeted SDLC address and the XID information is displayed in one of the following messages: “SDLLC-6-XID_DISPLAY” or “SDLLC-6-FORMAT.”

Recommended Action This is a security feature. The additional information is displayed to help trace the source of the rejected XID. If the message is undesirable, simply remove the XID statement from the router configuration.

SDLLC Messages

The following are Synchronous Data Logical Link Control (SDLLC) Logical Link Control Type 2 (LLC2) 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 the deactivation was the 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 the session loss is related to LLC2 timers by entering the **debug llc2-err** command. If the problem is related to LLC2 timers, consider using SDLLC with the local acknowledgment feature. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SEC Messages

The following are IP security error messages.

Error Message

```
%SEC-6-IPACCESSLOGDP: list [chars] [chars] [chars] [IP_address] [chars]->
[IP_address] ([dec]/[dec]), [dec] packet[chars]
```

Explanation A packet matching the log criteria for the given access list has been detected.

Recommended Action No action is required.

Error Message

```
%SEC-6-IPACCESSLOGNP: list [chars] [chars] [dec] [IP_address] [chars]->
[IP_address], [dec] packet[chars]
```

Explanation A packet matching the log criteria for the given access list has been detected.

Recommended Action No action is required.

Error Message

```
%SEC-6-IPACCESSLOGP: list [chars] [chars] [chars] [IP_address]([dec]) [chars]->
[IP_address]([dec]), [dec] packet[chars]
```

Explanation A packet matching the log criteria for the given access list has been detected.

Recommended Action No action is required.

Error Message

```
%SEC-6-IPACCESSLOGRP: list [chars] [chars] [chars] [IP_address] [chars]->
[IP_address], [dec] packet[chars]
```

Explanation A packet matching the log criteria for the given access list has been detected.

Recommended Action No action is required.

Error Message

```
%SEC-6-IPACCESSLOGS: list [chars] [chars] [IP_address] [dec] packet[chars]
```

Explanation A packet matching the log criteria for the given access list was detected.

Recommended Action No action is required.

Error Message

```
%SEC-3-NOMAX: No default for NLESO defined
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SEC-2-NOOPT: Box secured, no option on internal packet
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%SEC-2-NOTSEC: First opt in tcb not BASIC security`

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%SEC-2-SECINS: Security opt in tcb not SECINSERT`

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%SEC-4-TOOMANY: Box secured, too many options on internal packet`

Explanation The system was not able to process the packet because there was not enough room for all of the desired IP header options. The packet has been discarded.

Recommended Action Change the configuration so that fewer IP header options are stored.

SERVICE_MODULE Messages

The following are service module error messages.

Error Message

`%SERVICE_MODULE-4-ACCESSERROR: Unit [chars] reports register access error - [chars]`

Explanation The T1 module has supplied an invalid register address. This error might occur if a new version of the module is using an older Cisco IOS software image that does not support the module in use.

Recommended Action Update the Cisco IOS software image on the system. If updating the software does not solve the problem, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SERVICE_MODULE-4-ALARMFAILURE: Unit [chars] - Could not access alarm status - disabling alarm processing

Explanation The system issued an alarm interrupt but could not read the alarm status register from the module. As a response, the system has disabled alarm processing.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SERVICE_MODULE-4-BADTYPE: Unit [chars] - reports incompatible module type [dec] against router hw detect

Explanation A register read request returned an identity for a module that was different from the identity that was reported by the router hardware pinout.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SERVICE_MODULE-4-COMMANDFAILED: Unit [chars] not ready/responding after register [dec] access command issued

Explanation The system did not receive a ready signal within the allotted time after writing to the command register.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SERVICE_MODULE-0-INITFAILURE: Unit [chars] - failed to create data structures used for module-access

Explanation The CSU/DSU driver failed to allocate memory for its data structures. This is a catastrophic error, and the system has crashed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SERVICE_MODULE-0-INITWICFAILURE: Unit [chars] - failed to download properly

Explanation The CSU/DSU driver detected a checksum error while downloading WIC firmware.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SERVICE_MODULE-4-INTERBYTETIMEOUT: Unit [chars] - timed out while [chars] byte [dec] of [dec] length register [dec]

Explanation The module took more than two seconds to respond between bytes.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SERVICE_MODULE-3-LOOPDOWNFAILED: Unit [chars] - WARNING - Loopdown of remote unit failed

Explanation A remote CSU is looping pings and test patterns back to the system. This error could be triggered if the user disabled loopbacks on the remote CSU after placing the remote CSU into remote loopback mode.

Recommended Action Execute a **clear** command on the remote CSU.

Error Message

%SERVICE_MODULE-5-LOOPDOWNREMOTE: Unit [chars] - Remote loopback test cancelled

Explanation A hardware or software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SERVICE_MODULE-5-LOOPUPFAILED: Unit [chars] - Loopup of remote unit failed

Explanation The loopback on the remote unit has failed. The failure might indicate that the network connection is broken or that loopbacks are disabled at the other side.

Recommended Action Verify that the router is connected to the network and enable loopbacks on the remote unit. If this process does not resolve the problem, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SERVICE_MODULE-5-LOOPUPREMOTE: Unit [chars] - Remote unit placed in loopback

Explanation The user issued a **loopback** command on the remote unit. The remote unit is now in loopback mode.

Recommended Action No action is required.

Error Message

%SERVICE_MODULE-4-NOTREADY: Unit [chars] not ready for register access

Explanation The module has been waiting for a ready status before executing a read/write request. The system reported a “not ready” status for 5 seconds. This condition caused the module to terminate the read/write request.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SERVICE_MODULE-4-OLDIMAGE: Unit [chars] - router image older than module version
- access errors may be seen

Explanation The Cisco IOS software image does not recognize the PROM software version number on the module. In this instance, the system displays this message if the PROM has been upgraded to a new version, but the Cisco IOS software image has not been upgraded.

Recommended Action Upgrade the Cisco IOS software image.

Error Message

%SERVICE_MODULE-4-REPEATEDRESET: Unit [chars] - giving up after [dec] repeated resets couldn't bring module up again

Explanation The software issued several **clear service-module** requests to the module, but the module did not respond to these requests.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SERVICE_MODULE-4-REQUESTOVERLOAD: Unit [chars] - module request overload - lock access timeout

Explanation The system employs a Cisco IOS scheduler semaphore object to ensure mutually exclusive access across software threads to the CSU/DSU. In this instance, a thread had to wait for more than 5 seconds on this semaphore.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SERVICE_MODULE-5-RESET: Reset of Unit [chars] issued

Explanation The module has been reset.

Recommended Action No action is required.

Error Message

%SERVICE_MODULE-4-RESETFAILURE: Unit [chars] - failed to create reset process - non-default module configuration may be lost

Explanation To execute a reset, the Cisco IOS software must initiate a separate process. The Cisco IOS software did not have sufficient memory to create this separate process. The module came up in an initialized state with the default configuration. The user-defined configuration may have been lost.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SERVICE_MODULE-4-UNKNOWNALARM: Unit [chars] reports unknown network alarms - alarm status reg = [hex]

Explanation A recent version of the module is operating with an older Cisco IOS software image that does not support the module version. The module did not recognize an alarm condition.

Recommended Action Update the Cisco IOS software image on the system. If updating the software does not resolve the problem, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SERVICE_MODULE-4-WICNOTREADY: Unit [chars] not ready for next command
```

Explanation The module has been waiting for the current request to be processed before sending the next request. The current request was in progress for more than 3 seconds.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SGBP Messages

The following are Stack Group Bidding Protocol error messages.

Error Message

```
%SGBP-7-ACTIVE: Member [chars] State -> Active
```

Explanation This message is generated only when SGBP errors or events debugging is enabled. This message indicates that a link to another SGBP member has completed the interactions to set up the link and is now entering the active state.

Recommended Action No action is required.

Error Message

```
%SGBP-5-ARRIVING: New peer event for member [chars]
```

Explanation This message is generated only when SGBP event debugging is enabled. This message indicates that an SGBP peer joined the group.

Recommended Action No action is required.

Error Message

```
%SGBP-1-AUTHFAILED: Member [chars] failed authentication
```

Explanation This message is generated only when SGBP debugging for hellos or errors is enabled. An attempted peer connection has ended in authentication failure. A peer may be configured incorrectly. This condition could also indicate an attempted breach of security.

Recommended Action Verify that the peer is correctly configured. If there is a chance that your network is under attack, obtain knowledgeable assistance. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SGBP-7-AUTHOK: Member [chars] State -> AuthOK

Explanation This message is generated only when SGBP debugging for errors or events is enabled. A message was received from another SGBP member indicating that an authentication attempt to that member succeeded.

Recommended Action No action is required.

Error Message

%SGBP-7-CANCEL: Local query #[dec]:[dec] for bundle [chars]

Explanation This message is generated only when SGBP query debugging is enabled. This message provides information about queries in progress.

Recommended Action No action is required.

Error Message

%SGBP-7-CHALLENGE: Send Hello Challenge to [chars] group [chars]

Explanation This message is generated only when SGBP debugging for hellos is enabled. This condition indicates that an authentication challenge has been sent to a peer.

Recommended Action No action is required.

Error Message

%SGBP-7-CHALLENGED: Rcv Hello Challenge message from member [chars] using [IP_address]

Explanation This message is generated only when SGBP debugging for hellos is enabled. This condition indicates that an authentication challenge has been received from a peer.

Recommended Action No action is required.

Error Message

%SGBP-7-CLOSE: Closing pipe for member [chars]

Explanation This message is generated only when SGBP event debugging is enabled. An interprocess communication link has been closed.

Recommended Action No action is required.

Error Message

%SGBP-1-DIFFERENT: Rcv [chars]'s addr [IP_address] is different from the hello's addr [IP_address]

Explanation The internally configured address for an SGBP member does not match the address of the host that tried to authenticate as that member. The configuration is incorrect either on this system or on the other member; they must agree.

Recommended Action Determine which configuration is in error and fix it.

Error Message

%SGBP-7-DONE: Query #[dec] for bundle [chars], count [dec], master is [chars]

Explanation This message is generated only when SGBP query debugging is enabled. This message provides information about queries in progress.

Recommended Action No action is required.

Error Message

%SGBP-7-DUPL: Duplicate local query #[dec] for [chars], count [dec], ourbid [dec]

Explanation This message is generated only when SGBP query debugging is enabled. This message provides information about queries in progress.

Recommended Action No action is required.

Error Message

%SGBP-1-DUPLICATE: Rcv Duplicate bundle [chars] is found on member [chars]

Explanation This message is generated only when SGBP debugging for hellos or errors is enabled and indicates that a duplicate bundle has been received from the same peer more than once. The duplicate bundle was discarded.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SGBP-7-EQUAL: [dec] equal highest bids, randomly select bid# [dec]

Explanation This message is generated only when SGBP query debugging is enabled. This message provides information about queries in progress.

Recommended Action No action is required.

Error Message

%SGBP-7-HANGUP: I am a forward-only member, can't forward bundle [chars], hangup

Explanation This message is generated only when SGBP query, event, and error debugging is enabled. This indicates a routine change of role for the router in its SGBP interactions with peers.

Recommended Action No action is required.

Error Message

%SGBP-3-INVALID: MQ message with [chars]

Explanation This message is generated only when SGBP debugging for errors is enabled. An invalid message has been received and discarded.

Recommended Action This condition probably indicates that an error has occurred in the network media or a peer and that erroneous packets are being generated.

Error Message

%SGBP-3-INVALIDADDR: Stack group [chars] IP address [IP_address]

Explanation The current configuration does not allow a local IP address to be configured using the **sgbp member** command. Any local address is automatically removed from the SGBP group.

Recommended Action Do not configure **sgbp member** using a local IP address.

Error Message

%SGBP-3-INVALIDDB: [chars] for bundle '[chars]' -- [chars]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SGBP-3-INVFIELD: [chars] field type [hex] has [chars] [dec] (expected [dec])

Explanation An SGBP request from a peer contained invalid or corrupt data.

Recommended Action Check the peer equipment or network media for any problems.

Error Message

%SGBP-7-KEEPALIVE: Sending Keepalive to [chars], retry=[dec]

Explanation This message is generated only when SGBP debugging for hellos is enabled. A keepalive message has been sent to an SGBP member.

Recommended Action No action is required.

Error Message

%SGBP-7-KEEPALIVE_TIMEOUT: Keepalive timeout on [chars]

Explanation This message is generated only when SGBP debugging for hellos is enabled. Keepalive messages have not been answered, so the pipe to an SGBP member was closed.

Recommended Action No action is required.

Error Message

%SGBP-5-LEAVING: Member [chars] leaving group [chars]

Explanation This message is generated only when SGBP event debugging is enabled. An SGBP peer has left the group.

Recommended Action No action is required.

Error Message

%SGBP-1-MISSCONF: Possible misconfigured member [chars] using [IP_address]

Explanation This message is generated only when SGBP debugging for hellos or error is enabled and indicates a configuration error. Either this router has an incorrect IP address listed for the peer or the peer is using an incorrect IP address.

Recommended Action Find and correct the configuration error.

Error Message

%SGBP-7-MQ: [chars] ([hex]) for query [dec]:[dec], bundle [chars], bid [dec], len [dec]

Explanation This message is generated only when SGBP error debugging is enabled. An SGBP query has been received.

Recommended Action No action is required.

Error Message

%SGBP-7-MQB: Bundle: [chars]State: [chars]OurBid: [dec]

Explanation This message is part of a list of debug states that are displayed at the request of the operator.

Recommended Action No action is required.

Error Message

%SGBP-7-NEWL: Local query #[dec] for [chars], count [dec], ourbid [dec]

Explanation This message is generated only when SGBP query debugging is enabled. It provides information about queries in progress.

Recommended Action This is a debug message only. No action is required.

Error Message

%SGBP-7-NEWP: Peer query #[dec] for [chars], count [dec], peerbid [dec], ourbid [dec]

Explanation This message is generated only when SGBP query debugging is enabled. This message provides information about queries in progress.

Recommended Action No action is required.

Error Message

%SGBP-7-NORESP: Failed to respond to [chars] group [chars], may not have password

Explanation An authentication challenge has been received, but there was no information available to respond to the authentication challenge. This condition probably indicates a configuration error or a missing password.

Recommended Action Refer to the documentation to configure a username that matches the SGBP group name.

Error Message

%SGBP-7-PB: [IP_address]State: [chars]Bid: [dec] Retry: [dec]

Explanation This message is part of a list of debug states that are displayed at the request of the operator.

Recommended Action No action is required.

Error Message

```
%SGBP-3-PEERERROR: Peer [IP_address] [chars] during 'PB [chars]' state for bundle [chars]
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SGBP-7-RCVD: MQ [chars] from [IP_address] for query [dec]:[dec], bundle [chars], bid [dec]
```

Explanation This message is generated only when SGBP message debugging is enabled. An SGBP packet has been received.

Recommended Action No action is required.

Error Message

```
%SGBP-7-RCVINFO: Received Info Addr = [IP_address] Reference = [hex]
```

Explanation This message is generated only when SGBP debugging for hellos is enabled. Data has been received by a listener process.

Recommended Action No action is required.

Error Message

```
%SGBP-7-RESPONSE: Send Hello Response to [chars] group [chars]
```

Explanation This message is generated only when SGBP debugging for hellos is enabled. A response to an authentication challenge has been sent to a peer.

Recommended Action No action is required.

Error Message

```
%SGBP-7-RESPONDED: Rcv Hello Response message from member [chars] using [IP_address]
```

Explanation This message is generated only when SGBP debugging for hellos is enabled. A response to an authentication challenge has been received from a peer.

Recommended Action No action is required.

Error Message

%SGBP-7-SENDAUTHOK: Send Hello Authentication OK to member [chars] using [IP_address]

Explanation This message is generated only when SGBP debugging for hellos is enabled. A message has been sent or re-sent to another SGBP member that indicates that an authentication attempt from that member has succeeded.

Recommended Action No action is required.

Error Message

%SGBP-7-SENDINFO: Send Info Addr to [chars]

Explanation This message is generated only when SGBP debugging for hellos is enabled. Data has been sent by the listener process in response to received data.

Recommended Action No action is required.

Error Message

%SGBP-7-SENT: MQ [chars] to [IP_address] for query [dec]:[dec], bundle [chars], bid [dec], len [dec]

Explanation This message is generated only when SGBP message debugging is enabled. An SGBP packet has been sent.

Recommended Action No action is required.

Error Message

%SGBP-5-SHUTDOWN: [chars]

Explanation This message is generated only when SGBP event debugging is enabled. A process involved in SGBP has been terminated upon completion of its work.

Recommended Action No action is required.

Error Message

%SGBP-5-STARTUP: [chars]

Explanation This message is generated only when SGBP event debugging is enabled. An process involved in SGBP has been started.

Recommended Action No action is required.

Error Message

```
%SGBP-3-TIMEOUT: Peer [IP_address] bidding; state 'PB [chars]' deleted
```

Explanation This message is generated only when SGBP event debugging is enabled and indicates that a peer timed out while closing a query. The connection was dropped.

Recommended Action Check the peer equipment and network media for problems.

Error Message

```
%SGBP-3-UNEXP: MQ [chars] from [IP_address] for query [dec]:[dec], bundle [chars],  
bid [dec], state [chars]
```

Explanation This message is generated only when SGBP error debugging is enabled. The SGBP connection has entered an unexpected state, possibly caused by a software error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SGBP-3-UNKNOWN: [IP_address] not known
```

Explanation This message is generated only when SGBP error debugging is enabled. An SGBP connection has been attempted by a host that was not recognized as a peer, and the connection was not accepted.

Recommended Action Depending on the network topology and firewall configuration, SGBP connection attempts from a nonpeer host could indicate probing and attempts to breach security. If there is a chance that your network is under attack, obtain knowledgeable assistance. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SGBP-3-UNKNOWNEVENT: Event [hex] from peer at [IP_address]
```

Explanation This message is generated only when SGBP error debugging is enabled. An invalid event has occurred, possibly caused by an internal software error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SGBP-1-UNKNOWNHELLO: Rcv Hello message from non-group member using [IP_address]

Explanation This message is generated as a result of a configuration error only when SGBP debugging for hellos or errors is enabled. An SGBP Hello message has been received from a host. The host is not a member of the SGBP group, and the message was discarded.

Recommended Action List the host in the configuration of this router as a member of the group. If the other host is not configured correctly, any attempts to join this group will fail.

Error Message

%SGBP-3-UNKNOWNPEER: Event [hex] from peer at [IP_address]

Explanation This message is generated only when SGBP error debugging is enabled. An SGBP event came from a network host that was not recognizable as an SGBP peer, and the event was discarded.

Recommended Action Determine whether a network media error could have corrupted the address, or whether peer equipment is malfunctioning and is generating corrupted packets. Depending on the network topology and firewall configuration, SGBP packets from a nonpeer host could indicate probing and attempts to breach security. If there is a chance that your network is under attack, obtain knowledgeable assistance. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SGCP Messages

The following are Simple Gateway Control Protocol (SGCP) error messages.

Error Message

%SGCP-2-INTERNAL_CRITICAL: [chars]

Explanation The SGCP subsystem encountered an internal software error. The error message contains text that can be used to help identify the nature of the problem.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%SGCP-3-INTERNAL_ERROR: [chars]

Explanation The SGCP subsystem encountered an internal software error. The error message contains text that can be used to help identify the nature of the problem.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%SGCP-4-INTERNAL_WARNING: [chars]

Explanation The SGCP subsystem encountered an internal software error. The error message contains text that can be used to help identify the nature of the problem.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

SGCP_APP Messages

The following are Simple Gateway Control Protocol (SGCP) application-related error messages.

Error Message

%SGCP_APP-6-CALL_REC_DATABASE_FAILED: Failed to create call record database

Explanation The system failed to create a call record database.

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

Error Message

%SGCP_APP-6-DIGIT_MAP_DATABASE_FAILED: Failed to create digit map database

Explanation The system failed to create endpoint database.

Recommended Action Check the amount of free memory to ensure that there is enough memory.

Error Message

%SGCP_APP-6-DNS_QUEUE_FAILED: Failed to create DNS message watched queue

Explanation The system failed to create a DNS message watched queue.

Recommended Action Check the amount of free memory to ensure that there is enough memory.

Error Message

%SGCP_APP-6-PROCESS_CREATION_FAILED: Cannot create SGCP application process\n

Explanation The system failed to create the SGCP application process.

Recommended Action Check the size of free memory to ensure that there is enough memory.

Error Message

%SGCP_APP-6-SOCKET_OPEN_FAILED: Failed to open UDP port for SGCP. IP Address is not configured or UDP port (2427) already in use.

Explanation The system failed to open a UDP port for the SGCP process. An IP address has not been configured, or the UDP port (2427) was already in use.

Recommended Action Verify that an IP address is configured and find out if any other applications use the same UDP port number (2427).

SHELF Messages

The following are router shelf error messages.

Error Message

%SHELF-5-AUTH_FAILED: MD5 digest does not match, SDP packet received from, [IP_address] rejected

Explanation An SDP hello packet has been received from a shelf that the system does not trust.

Recommended Action Either specify the correct SDP password or destination on the shelf from which this message was received.

Error Message

%SHELF-3-DISCOVER_SOCKET_OPEN: socket open failed

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SHELF-6-HELLO_PROCESS_START: Shelf hello process has started.

Explanation An internal system controller process has been started. This is an informational message only. Informational messages can be disabled by changing logging level.

Recommended Action No action is required.

Error Message

%SHELF-6-HELLO_PROCESS_STOP: Shelf hello process has been stopped.

Explanation An internal system controller process has completed its work. This is an informational message only. Informational messages can be disabled by changing logging level.

Recommended Action No action is required.

Error Message

%SHELF-6-SYSCTLR_ESTABLISHED: Configured via system controller located at [IP_address]

Explanation Configuration information has been received from a system controller. This is an informational message only. Informational messages can be disabled by changing logging level.

Recommended Action No action is required.

SIGSM Messages

The following are Signaling Service Manager error messages.

Error Message

%SIGSM-1-BAD_VAR_ERR: Out of range variable index [dec] [chars]

Explanation There is a fault in a default template, or the user has provided a custom template that refers to a variable that is outside the range of the **cas-custom** command variables.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SIGSM-1-EVENT_ERR: Unexpected event

Explanation An error in the signaling state machine has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%SIGSM-1-NO_TEMPLATE_ERR: No static template found for slot [dec] port [dec] with parameters provided`

Explanation The system could not find a matching static template that has the same parameters as those used by the controller.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SLB Messages

The following are server load balancing (SLB) error messages.

Error Message

`%SLB-4-UNEXPECTED: Unexpected error: [chars]`

Explanation An unexpected error occurred during an SLB operation.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%SLB-4-WARNING: Unexpected condition: [chars]`

Explanation An unexpected condition was detected during an SLB operation.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SLB_DFP Messages

The following are server load balancing (SLB) Dynamic Feedback Protocol (DFP) agent error messages.

Error Message

`%SLB_DFP-4-BAD_LEN: Agent [IP_address]:[int] - Invalid message length - [int]`

Explanation Too many errors have occurred during the reading of the message header from the SLB DFP agent.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SLB_DFP-4-BAD_MSG: Agent [IP_address]:[int] - Unknown message type [int], vector [int]
```

Explanation An unknown message type has been received from the SLB DFP agent.

Recommended Action This message can result from a bad code image. The messages sent from one DFP box are formatted incorrectly. If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information. Be sure to specify which images are running on the systems sending and receiving the bad messages.

Error Message

```
%SLB_DFP-4-BAD_SEND: Agent [IP_address]:[int] - Send failed
```

Explanation An attempt to send a message to the SLB DFP agent has failed.

Recommended Action Verify that the IP address of the DFP agent can be reached using a **ping** or **traceroute** command. Also verify that the DFP agent is running on the destination machine. Unconfigure and reconfigure the DFP. If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SLB_DFP-4-BIG_MSG: Agent [IP_address]:[int] - Message length [int], too big
```

Explanation The message received from the SLB DFP agent exceeds the maximum allowable size.

Recommended Action Recycle the DFP. If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SLB_DFP-4-BIG_VEC: Agent [IP_address]:[int] - Message type [int], vector [int] too big
```

Explanation The message received from the SLB DFP agent exceeds the maximum allowable size.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SLB_DFP-4-CON_FAIL: Agent [IP_address]:[int] - Socket_connect failed
```

Explanation An attempt to connect a socket to the SLB DFP agent has failed.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SLB_DFP-4-KEEP_ALV. : Agent [IP_address]:[int] - Have not received keep alive

Explanation Keepalive messages have not been received from the SLB DFP agent. A lack of keepalive messages can be caused by any of the following situations:

- A network outage might have occurred. Verify that the IP address of the DFP agent can be reached using the **ping** or **traceroute** command.
- The DFP might not be running properly, but has not crashed. Verify that the DFP agent is running on the destination machine. Recycle the DFP agent on the host server.
- Network congestion is occurring, or a host or router is busy. Set the timer value a little higher.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SLB_DFP-4-NO_PARSE: Agent [IP_address]:[int] - Could not parse message

Explanation The message received from the SLB DFP agent could not be parsed.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SLB_DFP-4-READ_ERR: Agent [IP_address]:[int] - Too many read errors

Explanation Too many errors occurred during the reading of the message header from the SLB DFP agent.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SLB_DFP-4-SOCK_ERR: Agent [IP_address]:[int] - Socket_recv error [dec]

Explanation A message involving a socket error has been received from the SLB DFP agent.

Recommended Action Recycle the DFP. If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SLB_DFP-4-SOCK_OPN: Agent [IP_address]:[int] - Socket already open

Explanation An attempt was made to open the socket to the SLB DFP agent when it was already open.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SLB_DFP-4-UKN_CON: Agent [IP_address]:[int] - Unknown connection state [int]

Explanation An unknown connection state occurred during the processing of the SLB DFP timer.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SLB_DFP-4-UNEXPECTED: Unexpected error: [chars]

Explanation An unexpected error occurred while the SLB DFP operation was being performed.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SLB_DFP-4-UNK_TYPE: Agent [IP_address]:[int] - Unknown message type [int]

Explanation A message of an unknown type has been received from the SLB DFP agent.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SLIP Messages

The following are Serial Line Internet Protocol error messages.

Error Message

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

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SLOTDUMP Messages

The following are slot dump error messages.

Error Message

```
%SLOTDUMP-3-CORE_DUMP_ERROR: Core dump error slot [dec]: [chars]
```

Explanation An error occurred during a core dump of slot.

Recommended Action No action is required.

SM Messages

The following are state machine error messages.

Error Message

```
%SM-4-BADEVENT: Event '[chars]' is invalid for the current state '[chars]':  
[chars] [chars]
```

Explanation An attempt was made to post an event that is invalid for the current state of the state machine.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%SM-4-INIT: Internal error while initializing state machine '[chars]', state '[chars]': [chars]
```

Explanation An attempt was made to initialize an invalid state machine.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%SM-4-PERSIST: Persistent event '[chars]' did not leave the current state '[chars]': [chars] [chars]
```

Explanation An attempt was made to post a persistent event that would have caused an infinite loop in a state machine.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%SM-4-STOPPED: Event '[chars]' ignored because the state machine is stopped: [chars] [chars]
```

Explanation An attempt was made to post an event to a state machine that has already been stopped.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

SMF Messages

The following are Software MAC Filter error messages.

Error Message

```
%SMF-4-INVALID_ACTION: failed to create SMF entry for [enet] on [chars] with result [hex]
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SMRP Messages

The following are Simple Multicast Routing Protocol error messages.

Error Message

```
%SMRP-2-ASSERTFAILED: SMRP assertion failed: [chars]
```

Explanation The software has detected an inconsistency. This condition is considered a serious error. The router attempts to continue, but SMRP processing might be impaired.

Recommended Action Copy the error message exactly as it appears, noting any SMRP problems that you are experiencing, and report it to your Cisco technical support representative.

Error Message

```
%SMRP-7-DEBUGMSG: SMRP Debug: [chars]
```

Explanation This message is generated by some debug commands to provide additional information about conditions in SMRP.

Recommended Action If you are experiencing problems in SMRP, these messages should be provided, along with any other information, in a report to your Cisco technical support representative.

Error Message

```
%SMRP-5-NEIGHBORDOWN: [chars]: SMRP neighbor down - [chars]
```

Explanation A neighboring SMRP router is now down.

Recommended Action This is an informational message only. No action is required.

Error Message

```
%SMRP-6-NEIGHBORUP: [chars]: SMRP neighbor up - [chars]
```

Explanation A neighboring SMRP router has appeared.

Recommended Action This is an informational message only. No action is required.

Error Message

```
%SMRP-3-NOFDDICOMPAT: SMRP port [chars] disabled; pre-fdditalk not supported
```

Explanation SMRP cannot be started on an interface running pre-FDDITalk.

Recommended Action Use FDDITalk on the FDDI ring, if possible.

Error Message

%SMRP-5-PORTDOWN: [chars]: SMRP port down - [chars]

Explanation An SMRP port is down and is no longer operational.

Recommended Action This is an informational message only. No action is required.

Error Message

%SMRP-6-PORTUP: [chars]: SMRP port up - [chars]

Explanation An SMRP port has come up.

Recommended Action This is an informational message only. No action is required.

SNAPSHOT Messages

The following are Snapshot dial-on-demand routing error messages.

Error Message

%SNAPSHOT-2-BADSTATE: Bad state for Snapshot block [chars][[dec]], location [dec]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNAPSHOT-2-TOOMANYDIALERS: Exceeded maximum dialer interfaces to watch. Ignoring [chars]

Explanation Snapshot is being used on more than 100 DDR interfaces.

Recommended Action Do not use Snapshot over more than 100 DDR interfaces.

SNASW Messages

The following are Systems Network Architecture Switching Services (SNASw) error messages.

Error Message

```
%SNASW-4-APPN_LOG_0: EXCEPTION - [int] - SNA Switch could not allocate necessary storage [chars]
```

Explanation The SNA switch could not allocate the necessary storage. Some operations might fail. Other logs will provide more information.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

```
%SNASW-3-APPN_LOG_1: PROBLEM - [int] - SNA Switch could not allocate necessary storage [chars]
```

Explanation The SNA switch could not allocate the necessary storage. Some operations will fail. See other logs or verbs.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

```
%SNASW-4-APPN_LOG_2: EXCEPTION - [int] - SNA Switch cryptography call failed, possibly due to missing password [chars]
```

Explanation A call from the SNA switch to perform a cryptographic operation has failed. The session activation will fail, an active session will end abnormally with the given sense code, or some other action will fail. More information may appear in subsequent logs.

Recommended Action Check the logs that follow for evidence of failed session activation: if evidence is present, check the MODE, LS, or INTERNAL PU definitions for cryptographic support. Check that any passwords that are necessary have been defined. If this problem occurs intermittently or with sessions already active with the same PLU, SLU, and mode, make more storage available to the SNA switch.

Error Message

```
%SNASW-3-ASM_LOG_0: PROBLEM - [int] - Received BIND request directed at this node with unrecognized secondary LU name [chars]
```

Explanation The system has received a BIND request directed at this node (either without an RSCV or at the last hop on the RSCV) with an unrecognized secondary LU name. This condition usually indicates a configuration error at the primary LU. The session activation will fail with the specified sense code.

Recommended Action Correct the primary LU configuration.

Error Message

%SNASW-3-ASM_LOG_2: PROBLEM - [int] - Insufficient storage to generate an Alert [chars]

Explanation There is insufficient storage to generate an alert to report a BIND segmentation or pacing error. The alert will not be sent.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-ASM_LOG_3: PROBLEM - [int] - Insufficient storage to process received BIND request [chars]

Explanation There is insufficient storage to process a received BIND request. The BIND request will be rejected with the specified sense code.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-ASM_LOG_4: PROBLEM - [int] - ACTPU, ACTLU, DACTPU or DACTLU received on link on which dependent LUs are not supported [chars]

Explanation An ACTPU, ACTLU, DACTPU or DACTLU was received over a link on which dependent LUs are not supported. This condition may indicate an interoperability problem. The request will be rejected with the specified sense code.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-ASM_LOG_5: PROBLEM - [int] - Branch Network Node received BIND request with badly formed RSCV [chars]

Explanation A branch network node has received a BIND request with a badly formed RSCV. This condition may indicate an interoperability problem. The session activation will fail.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-ASM_LOG_6: PROBLEM - [int] - Badly-formed BIND request rejected by SNA Switch [chars]

Explanation The SNA switch has received and rejected a badly formed BIND request. This condition may indicate an interoperability problem. The session activation will fail.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-ASM_LOG_11: PROBLEM - [int] - Received BIND request with badly formed secondary LU name [chars]

Explanation The system has received a BIND request with a badly formed secondary LU name. This may indicate an interoperability problem. The session activation will fail with the specified sense code.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-ASM_LOG_12: PROBLEM - [int] - Received BIND request where network ID of secondary LU does not match local network ID [chars]

Explanation The system has received a BIND request in which the network identifier of the secondary LU does not match local network identifier. The session activation will fail with the specified sense code.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-ASM_LOG_15: EXCEPTION - [int] - Insufficient storage to deactivate link [chars]

Explanation Insufficient storage is available to deactivate a link. The link will not be deactivated.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-ASM_LOG_18: EXCEPTION - [int] - Unable to correlate received BIND response [chars]

Explanation The system is unable to correlate the received BIND response. This condition is a normal race condition and occurs when a BIND is followed immediately by an UNBIND for the same session. The BIND response is discarded.

Recommended Action No action is required.

Error Message

%SNASW-3-ASM_LOG_19: PROBLEM - [int] - Received BIND using LFSID that is already in use [chars]

Explanation The system has received a BIND using an LFSID that the system is already using. This condition is usually caused by a race condition (a BIND, UNBIND, BIND sequence all using the same LFSID, where the second BIND overtakes the UNBIND). Nodes at the current level of APPN contain "LFSID aging" processes to minimize the changes of this race condition, but some older implementations may not support this processing. The BIND will be rejected with the specified sense code.

Recommended Action If this message is persistent, or occurs frequently, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-ASM_LOG_22: PROBLEM - [int] - Session control request received with invalid LFSID [chars]

Explanation A session control request with an invalid LFSID (that is, an LFSID that is not in a range appropriate for the request) has been received. This condition may indicate an interoperability problem. The request will be rejected with the specified sense code.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-ASM_LOG_24: PROBLEM - [int] - Failed to initialize address space instance [chars]

Explanation There is insufficient storage to create an LFSID routing table for a link station. Link activation will fail.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-ASM_LOG_25: EXCEPTION - [int] - Unable to extend local form session identifier routing table [chars]

Explanation The system is unable to extend the LFSID routing table. The session activation will fail with the specified sense code.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-ASM_LOG_26: EXCEPTION - [int] - Independent LU session deactivated because LU deleted [chars]

Explanation An independent LU-LU session has been deactivated because the local LU has been deleted.

Recommended Action No action is required.

Error Message

%SNASW-3-ASM_LOG_27: PROBLEM - [int] - Detected fatal BIND or UNBIND protocol error [chars]

Explanation The system has detected a fatal BIND or UNBIND protocol error. This condition may indicate an interoperability problem. Sense codes are as follows:

- 20110000—BIND pacing window overrun, or PI not set when expected.
- 20110001—Unexpected solicited BIND IPM.
- 20110002—PI set when not expected.
- 20110003—Pacing response not IPM.
- 10020000—RU (BIND, UNBIND or BIND IPM) length error.
- 10010003—BIND IPM format error.
- 80070000—BIND or RSP(BIND) segment out of sequence, or segmented UNBIND or RSP(UNBIND).
- 80070002—BIND or RSP(BIND) segments interleaved.
- 800F0000—LFSID incorrect for SC request.
- 800F0001—ODAI incorrect.

The link will be deactivated.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-ASM_LOG_28: PROBLEM - [int] - Received BIND IPM on link where adaptive BIND pacing not supported [chars]

Explanation The system has received a BIND IPM on a link where adaptive BIND pacing is not supported. This may indicate an interoperability problem. The BIND IPM will be discarded.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-ASM_LOG_29: EXCEPTION - [int] - Dependent LU session deactivated because LU deleted [chars]

Explanation A dependent LU-LU session has been deactivated because the LU has been deleted.

Recommended Action No action is required.

Error Message

%SNASW-3-BAD_MSG_NAME: Invalid message name specified for snasw msg-trap

Explanation An invalid message name was supplied on a **snasw msg-trap** command.

Recommended Action Enter the command again with a valid message name.

Error Message

%SNASW-4-CH2_LOG_0: EXCEPTION - [int] - CRV exchange failed on a PLU-SLU session. The session will fail [chars]

Explanation A CRV exchange has failed. This condition indicates that the cryptography keys that are configured at this LU and the partner LU are inconsistent. The session will be deactivated with the sense code 08350001.

Recommended Action Use the information in the session-deactivated problem log (log 271) to identify the local LU and partner LU and correct the cryptography key mismatch.

Error Message

%SNASW-4-CH2_LOG_1: EXCEPTION - [int] - Protocol error during CRV exchange [chars]

Explanation Protocol error during CRV exchange. This indicates a possible interoperability problem. Sense codes are as follows:

- 20090000—CRV request received from the secondary LU, or CRV response received from the primary LU, or CRV not received when expected.
- 10020000—CRV RU too short.
- 400F0000—CRV with FI not set.
- 400B0000—CRV chain indicators not set to BC, EC.

- 40140000—The CRV not RQD1.
- 40110000—The CRV not expedited.
- 40150000—The CRV with QRI not set.
- 40080000—The CRV with PI set.
- 400C0000—The CRV request with BBI, EBI or CEBI set.
- 400D0000—The CRV request with CDI set.
- 40100000—The CRV request with CSI set to CODE1.
- 40160000—The CRV request with EDI set.
- 40170000—The CRV request with PDI set.
- 40130000—The CRV response RTI and SDI inconsistent.

The session will be deactivated with the specified sense code.

Recommended Action Use the information on the session deactivated problem log (271) to identify the local LU and partner LU. Run a trace on the specified link station and contact your Cisco technical support representative with the log and trace information.

Error Message

```
%SNASW-4-CH2_LOG_2: EXCEPTION - [int] - Insufficient storage to initialise half session [chars]
```

Explanation Available storage was insufficient for initializing the half session. The half session activation will fail with the specified sense code.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

```
%SNASW-4-CH_LOG_0: EXCEPTION - [int] - LU type 0,1,2 or 3 format error [chars]
```

Explanation An LU type 0, 1, 2, or 3 format error has occurred. This condition may indicate an interoperability problem. The PIU containing the error is discarded.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SNASW-4-CH_LOG_1: EXCEPTION - [int] - LU type 0,1,2 or 3 session ended abnormally because of insufficient storage [chars]
```

Explanation An LU type 0, 1, 2, or 3 session has ended abnormally because of insufficient storage. The session will be deactivated with the specified sense code.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-CH_LOG_2: EXCEPTION - [int] - LU type 0,1,2 or 3 session ended abnormally while receiving data [chars]

Explanation An LU type 0, 1, 2, or 3 session has ended abnormally while receiving data. The session will be deactivated with the specified sense code.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-CH_LOG_3: EXCEPTION - [int] - LU type 0,1,2 or 3 session ended abnormally because of invalid application data [chars]

Explanation An LU type 0, 1, 2, or 3 session has ended abnormally because of invalid data received from the application. The session will be deactivated with the specified sense code.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-CH_LOG_4: EXCEPTION - [int] - Application sent invalid Data message [chars]

Explanation An LU type 0, 1, 2, or 3 application has sent an invalid Data message. A status acknowledge (NACK-2) was sent to the application.

Recommended Action Investigate the error in the application.

Error Message

%SNASW-4-CH_LOG_5: EXCEPTION - [int] - Application sent invalid Status Control message [chars]

Explanation An LU type 0, 1, 2, or 3 application has sent an invalid Status Control message. A Status Control (NACK-2) was sent to the application.

Recommended Action Investigate the error in the application.

Error Message

%SNASW-4-CH_LOG_6: EXCEPTION - [int] - Application sent invalid Acknowledgment or Status message [chars]

Explanation An LU type 0, 1, 2, or 3 application has sent an invalid Acknowledgment or Status message. A Status error was sent to the application.

Recommended Action Investigate the error in the application.

Error Message

%SNASW-4-CH_LOG_8: EXCEPTION - [int] - Insufficient storage to report RTM statistics to Host [chars]

Explanation Available storage was insufficient for reporting the RTM statistics to the host. The RTM statistics displayed by the host will be inconsistent.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-CH_LOG_9: EXCEPTION - [int] - Insufficient storage to report RTM status to application [chars]

Explanation Available storage was insufficient for reporting the RTM status to the application. The RTM statistics reported and displayed by the application may be inconsistent.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-CLSIBadPrimitive: CLSI bad primitive type, header= [chars]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-CLSIBadReturnCode: CLSI bad return code: [dec], header= [chars]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-CLSIFailure: SNASW failed to process CLSI message, header= [chars]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-CPUUsage: SNASw process, type [hex] ran for [int] ms processing IPS of type [hex], address [hex]

Explanation A process within the SNA switch ran for an unexpectedly long time.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-CS_LOG_0: PROBLEM - [int] - An active link station has failed [chars]

Explanation An active link station has failed. The link and any sessions using it will be deactivated.

Recommended Action Attempt to restart the link. If the problem persists, inspect the log for problems or exceptions that were logged by the DLC that give more specific reasons for the failure, and follow the actions specified by those logs. Otherwise, run a trace on the specified port or link station to find the reason for the failure.

Error Message

%SNASW-3-CS_LOG_1: PROBLEM - [int] - XID exchange count exceeds activation limit [chars]

Explanation The number of XIDs that were received during link activation exceeded the limit defined for the port. This condition could indicate an XID protocol error or an excessively unreliable physical medium. The sense data gives more information about the error:

- 083E0001—The limit was exceeded while prenegotiation or negotiation XIDs were being exchanged.
- 0809003A—The limit was exceeded while NULL XIDs were being exchanged.

Link activation will fail.

Recommended Action Retry the activation. If the SNA switch is still unable to activate the link station, run a trace on the link station or port to diagnose the problem.

Error Message

%SNASW-3-CS_LOG_2: PROBLEM - [int] - XID exchange count exceeds nonactivation limit [chars]

Explanation The number of XIDs received during nonactivation exchange exceeded the limit that was defined for the port. This condition could indicate an XID protocol error or an excessively unreliable physical medium. Nonactivation XID exchange will fail, and the link will be deactivated.

Recommended Action Run a trace on the link station or port to diagnose the problem, and contact your Cisco technical support representative with the trace information.

Error Message

%SNASW-3-CS_LOG_3: PROBLEM - [int] - Insufficient storage to activate link [chars]

Explanation Available storage was insufficient for activating the link, and the link activation will fail.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-CS_LOG_4: PROBLEM - [int] - Link to back-level LEN node not configured [chars]

Explanation An XID3 from an adjacent back-level LEN node (not carrying a network name control vector) has been received, and there was not a link configured to that back-level LEN node. An implicit link cannot be activated because the CP name of the adjacent node is not known. Inbound link activation will fail.

Recommended Action Define a link station by entering the **snasw link** command with `adj_cp_type` set to `NAP_BACK_LEVEL_LEN_NODE`.

Error Message

%SNASW-3-CS_LOG_5: PROBLEM - [int] - Link to host not configured correctly (host is not a Type 2.1 node) [chars]

Explanation The link to host is incorrectly configured as a link to a Type 2.1 node. Link activation will fail.

Recommended Action Define or redefine the link station by entering the **snasw link** command with `adj_cp_type` set to `NAP_HOST_XID3` or `NAP_HOST_XID0`.

Error Message

%SNASW-3-CS_LOG_6: PROBLEM - [int] - XID protocol error during activation exchange [chars]

Explanation An XID protocol error occurred during the activation exchange. This condition may indicate an interoperability problem between this node and the adjacent node, or this condition may be caused by the adjacent node resetting and restarting the exchange without sending a DISC or DM frame. The sense codes are as follows:

- 0806002C—The adjacent node has changed its network name during the course of an XID exchange.
- 0809003A—A null XID was received when an XID format 3 was expected.
- 0809003C—Prenegotiation XID received when not expected (had already received a negotiation proceeding XID3).
- 0809003D —Nnonactivation XID received when a null XID or activation XID was expected.
- 08090040—Received an unexpected or invalid mode-setting command (for example, SNRM or SABME).
- 08090045—The adjacent node has stopped supporting exchange state indicators in the middle of an XID exchange.

- 08090046—The adjacent node had previously indicated it did not support exchange state indicators, but has sent a XID with exchange state indicators set.
- 08090047—An XID was received after receipt of a mode-setting command (such as SNRM or SABME).
- 08090048—An unsolicited XID was received from an NRM secondary link station.
- 08090049—The adjacent node has sent an XID error control vector (x'22'). 08090055—Invalid VRN in TG descriptor CV of XID3.
- 086F0000—XID3 control vector length error.
- 088C1000—The adjacent node is a network node, but did not include a product set identifier control vector in the XID3.
- 088C0EF1—The adjacent node is type 4 or 5, but did not include a PU name control vector.
- 088C0EF4—The adjacent node has no been inconsistent in including a network name control vector.
- 088C4680—An XID was received on an ATM port, but it did not include a TG identifier TG descriptor subfield.
- 08910004—The network name control vector does not contain a valid network identifier.
- 08910005—The network name control vector does not contain a valid CP name.
- 0895xyxy—XID3 control vector error (xx indicates key of first control vector in error, yy indicates offset of error within control vector).
- 08960000—The control vector is too long.
- 08960001—The network name control vector is too long.
- 10150001—A received XID3 is too short (less than 29 bytes).
- 10150002—The length of a received XID3 does not match the length indicated in XID3.
- 10160000—The adjacent node indicated an invalid BIND pacing setting.
- 10160001—The maximum number of I-frames that the adjacent node can receive before sending an acknowledgment is set to zero.
- 10160003—The maximum BTU size the adjacent node can receive is set to less than 99 bytes.
- 10160004—Unexpected XID format.
- 10160005—The adjacent end node supports receipt of BIND segments but does not support BIND segment generation.
- 10160006—The adjacent end node does not support receipt of BIND segments and has a maximum BTU size of less than 265 bytes.
- 10160007—The adjacent network node does not support receipt of BIND segments and has a maximum BTU size of less than 521 bytes.
- 10160008—The adjacent node has been inconsistent in its setting of networking capabilities.
- 10160009—The adjacent network node supports CP-CP sessions but does not provide CP services.
- 1016000B—The adjacent node has selected zero as the TG number; this value is invalid.
- 1016000C—The adjacent network node does not support BIND segment generation and has a maximum BTU size of less than 521 bytes.
- 1016000D—The adjacent node does not support the SDLC command/response profile (which is the only profile supported by APPN and LEN nodes).

- 1016000E—The product set identifier on XID3 has changed.
- 10160010—The ABM support indicated in sent and received XID3s is inconsistent.
- 10160013—The DLC type in sent and received XIDs are not in agreement.
- 10160014—The adjacent node has changed its role from nonnegotiable to negotiable.
- 10160015—The adjacent node supports BIND pacing as sender only.
- 10160017—After two exchanges, randomized node IDs sent by this node and the adjacent node are still identical.
- 1016001A—The adjacent node is inconsistent in its support for parallel TGs.
- 1016001B—The adjacent node provides or requests CP services but does not support CP-CP sessions.
- 1016001C—The adjacent node indicated an LS role that was not primary, secondary, or negotiable.
- 1016001E—The adjacent node did not send its CP name in XID3 but requested CP-CP sessions on this link.
- 10160020—The adjacent node is not type 2, 4, or 5.
- 10160022—The adjacent node included an HPR Capabilities [x'61'] control vector in its XID3 but specified a maximum BTU size less than 768.
- 10160023—The adjacent node included an HPR Capabilities [x'61'] control vector in its XID3 but specified an invalid ANR label length (less than 1 or greater than 8).
- 10160026—The NCE field lengths in the HPR Control Flows [x'81'] subfield are inconsistent with the length of the HPR Capabilities [x'61'] control vector.
- 10160027—The adjacent node indicated support for control flows over RTP, but it did not include an HPR Control Flows [x'81'] subfield.
- 10160028—The adjacent node has specified an invalid error mode in its HPR Capabilities CV.
- 10160034—The adjacent node indicated no support for LDLC, but the local node supports only LDLC.
- 10160044—The adjacent node indicated support for LDLC, but did not include an LLC SAP subfield in the HPR Capabilities CV. Link activation will fail.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SNASW-3-CS_LOG_7: PROBLEM - [int] - No free TG numbers [chars]
```

Explanation No free TG numbers are available between this node and the specified adjacent node. This condition should occur only if there are already 236 parallel TGs between this node and the adjacent node. Link activation will fail.

Recommended Action Reconfigure the network to reduce the number of parallel TGs between this node and the specified adjacent node.

Error Message

%SNASW-3-CS_LOG_8: PROBLEM - [int] - XID protocol error during non-activation exchange [chars]

Explanation An XID protocol error has occurred during a non-activation exchange. This condition may indicate an interoperability problem between this node and the adjacent node. The sense codes are as follows:

- 0809003A—A null XID was received when an activation XID format 3 was expected.
- 0809003B—A null XID was received when a nonactivation XID format 3 was expected.
- 0809003E—An activation XID was received when a nonactivation XID was expected.
- 0809003F—The adjacent node initiated a secondary-initiated nonactivation XID exchange on a link that does not support secondary-initiated nonactivation XID exchanges.
- 08090042—The nonactivation exchange initiation indicator was not set when expected.
- 0809004E—A non-null XID was received from a secondary NRM link station when a null XID was expected.
- 10160002—The adjacent node has been inconsistent in its setting of the ACTPU suppression indicator.
- 10160008—The adjacent node has been inconsistent in its setting of networking capabilities.
- 1016000B—The adjacent node attempted to change TG number during nonactivation exchange to a TG number that was already in use.
- 10160019—The adjacent node has attempted to change its CP name when CP-CP sessions supported on link station, or the link station is not quiesced.

The link will be deactivated.

Recommended Action Run a trace on the link station or port to obtain more diagnostic information on the problem. Contact your Cisco technical support representative with the log and trace information.

Error Message

%SNASW-3-CS_LOG_9: PROBLEM - [int] - Link to host not configured correctly (host is not a DSPU) [chars]

Explanation The link to the host has been incorrectly configured as a link to a DSPU. Link activation will fail.

Recommended Action Define or redefine the link station by entering the **snasw link** command with **adj_cp_type** set to **NAP_HOST_XID3** or **NAP_HOST_XID0**.

Error Message

%SNASW-3-CS_LOG_10: PROBLEM - [int] - Link to host not configured [chars]

Explanation An unexpected SET_MODE has been received from an adjacent host before the XID exchange had completed, and there was not a link configured to that host. An implicit link cannot be activated because there is no local PU defined to use the link. Inbound link activation will fail.

Recommended Action Define a link station by entering the **snasw link** command with **adj_cp_type** set to **NAP_HOST_XID3** or **NAP_HOST_XID0**.

Error Message

%SNASW-3-CS_LOG_11: PROBLEM - [int] - Parallel TGs not supported to this adjacent node [chars]

Explanation The system attempted to activate more than one TG to an adjacent node that does not support parallel TGs. Link activation will fail.

Recommended Action Modify the configuration so that only one link station is defined to the specified adjacent node. Alternatively, several links to the adjacent node can be defined, but only one can be active at a time.

Error Message

%SNASW-4-CS_LOG_12: EXCEPTION - [int] - Insufficient storage to perform orderly link deactivation (link deactivated immediate instead) [chars]

Explanation Available storage was insufficient for performing orderly link deactivation. The system performed an immediate deactivation instead.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-CS_LOG_13: PROBLEM - [int] - Conflicting requirements for error recovery, link is not HPR-capable [chars]

Explanation During an attempt to activate a link that is HR-capable, error-recovery requirements for a local node and a partner node were in conflict. The link will activate, but it will not be HPR-capable.

Recommended Action To allow HPR protocols to be used on the link, each of the local and partner nodes must be able to accommodate the error recovery requirements of the other. At the minimum, this will require reconfiguration, but reconfiguration may not always be possible.

Error Message

%SNASW-4-CS_LOG_14: EXCEPTION - [int] - Insufficient storage to update ANR routing tables following deactivation of an HPR-capable link [chars]

Explanation Available storage was insufficient for updating the ANR routing tables following deactivation of an HPR-capable link. The node may not be able to free resources that are no longer required but will otherwise operate normally.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-CS_LOG_15: EXCEPTION - [int] - Insufficient storage to update ANR routing tables following activation of an HPR-capable link [chars]

Explanation Available storage was insufficient for updating the ANR routing tables following the activation of an HPR-capable link. HPR traffic using this ANR label will not be routed correctly, possibly causing RTP connections to path-switch or fail altogether.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-CS_LOG_17: PROBLEM - [int] - DLC failed [chars]

Explanation A DLC has ended abnormally. All ports and link stations defined on the DLC will be inoperative.

Recommended Action Restart the DLC by entering the **snasw start port** command. If the problem persists, look for DLC-specific logs giving more information about the reason for the failure.

Error Message

%SNASW-4-CS_LOG_19: EXCEPTION - [int] - Insufficient storage to forward Alert generated by DLC [chars]

Explanation Available storage was insufficient for forwarding an alert generated by the DLC. The alert will be discarded.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-CS_LOG_22: PROBLEM - [int] - Unable to deactivate port [chars]

Explanation The system is unable to deactivate the specified port. The **snasw stop port** command will fail, and the port may not restart successfully.

Recommended Action Attempt to restart the port, if required. If restart fails, look for DLC specific logs giving more information about the reason for the failure.

Error Message

%SNASW-3-CS_LOG_24: PROBLEM - [int] - Unrecoverable DLC failure [chars]

Explanation An unrecoverable DLC failure has occurred. The DLC will be destroyed, and all ports and link stations defined on the DLC will be inoperative.

Recommended Action Restart the DLC and ports by entering the **snasw start port** command. If these operations fail, or this problem is persistent, run a trace on the DLC and contact your Cisco technical support representative with the log and trace information.

Error Message

%SNASW-4-CS_LOG_25: EXCEPTION - [int] - Link not configured for automatic activation or last stopped non-automatically [chars]

Explanation A session or application required the SNA switch to activate a link station automatically, but the link station was not configured to be automatically activated or was not stopped automatically the last time it was stopped. The session or application will fail with the specified sense code.

Recommended Action Either manually activate the link by entering the **snasw start link** command or redefine the link to support automatic activation by entering the **snasw link** command.

Error Message

%SNASW-4-CS_LOG_26: EXCEPTION - [int] - Unable to activate link station because owning port is not active [chars]

Explanation A session or application required the SNA switch to activate a link station automatically, but the request failed because the owning port was not active. This problem usually indicates an inconsistency in the network topology that may be transient (caused by a normal race condition) or permanent (indicated by logs 127 or 128). The session or application will fail with the specified sense code.

Recommended Action If possible, increase the port link-activation limits. Otherwise, check the consistency of the network topology.

Error Message

%SNASW-4-CS_LOG_27: EXCEPTION - [int] - Unable to find requested link [chars]

Explanation A session required the SNA switch to activate a link station automatically, but the SNA switch was unable to identify the requested link. This problem usually indicates an inconsistency in the network topology that may be transient (caused by a normal race condition) or permanent (indicated by logs 127 or 128). The session will fail with the specified sense code.

Recommended Action Check the consistency of the network topology.

Error Message

%SNASW-4-CS_LOG_28: EXCEPTION - [int] - Unable to activate dynamic link station because owning port is not active [chars]

Explanation A session required the SNA switch to activate a dynamic link station automatically, but the request failed because the owning port was not active. This problem usually indicates an inconsistency in the network topology that may be transient (that is, caused by a normal race condition) or permanent (indicated by logs 127 or 128). The session will fail with the specified sense code.

Recommended Action If possible, increase the port activation limits. Otherwise, check the consistency of the network topology.

Error Message

%SNASW-4-CS_LOG_29: EXCEPTION - [int] - Unable to find requested connection network [chars]

Explanation A session required the SNA switch to activate a dynamic link station automatically, but the SNA switch was unable to identify the requested connection network. This problem usually indicates an inconsistency in the network topology that may be transient (caused by a normal race condition) or permanent (indicated by logs 127 or 128). The session will fail with the specified sense code.

Recommended Action Check the consistency of the network topology.

Error Message

%SNASW-3-CS_LOG_30: PROBLEM - [int] - Incoming call rejected because port link-activation limits exceeded [chars]

Explanation An incoming call was rejected because the port link-activation limits would be exceeded by this call. The link activation will fail.

Recommended Action If possible, increase the port link-activation limits.

Error Message

%SNASW-3-CS_LOG_31: PROBLEM - [int] - The CP name on an XID3 received from adjacent node is different to that expected [chars]

Explanation The CP name on an XID3 that has been received from an adjacent node is different from the expected CP name. The link activation will fail.

Recommended Action If the received adjacent CP name is correct, correct the link station configuration by entering the **snasw link** command. Depending on other aspects of the link station definition, the CP name check can be disabled by entering the **snasw link** command with the **adj_cp_name** field set to all zeros.

Error Message

%SNASW-3-CS_LOG_32: PROBLEM - [int] - The node ID on an XID3 received from a back-level node is different to that expected [chars]

Explanation The node ID on an XID3 received from a back level node is different from the expected node ID. The link activation will fail.

Recommended Action If the received node ID is correct, correct the link station configuration by entering the **snasw link** command. Depending on other aspects of the link station definition, the node ID check can be disabled by entering the **snasw link** command with the **adj_node_id** field set to all zeros.

Error Message

%SNASW-3-CS_LOG_33: PROBLEM - [int] - The node type indicated on an XID3 received from an adjacent node is different to that expected [chars]

Explanation The node type indicated on an XID3 received from an adjacent node is different from the expected node type. The link activation will fail.

Recommended Action If the received node type is correct, correct the link station configuration by entering the **snasw link** command. Depending on other aspects of the link station definition, the node type check can be disabled by entering the **snasw link** command with the `adj_node_type` field set to `NAP_LEARN_NODE`.

Error Message

%SNASW-3-CS_LOG_34: PROBLEM - [int] - Both sent and received XIDs indicate the same, non-negotiable, link station role [chars]

Explanation Both sent and received XIDs indicate the same nonnegotiable link station role. The link activation will fail.

Recommended Action Either correct the local port definition or the remote definition so that the link station roles are complementary or at least one link station is negotiable.

Error Message

%SNASW-4-CS_LOG_35: EXCEPTION - [int] - Unable to activate link station because port total link-activation limit reached [chars]

Explanation A session or application required the SNA switch to activate a link station automatically, but the request failed because it would have exceeded the port total link-activation limit. This problem usually indicates an inconsistency in the network topology that may be transient (caused by a normal race condition) or permanent (indicated by logs 127 or 128). The session or application will fail with the specified sense code.

Recommended Action Check the consistency of the network topology.

Error Message

%SNASW-4-CS_LOG_36: EXCEPTION - [int] - Unable to activate link station because port outbound link-activation limit reached [chars]

Explanation A session or application required the SNA switch to activate a link station automatically, but the request failed because it would have exceeded the maximum number of concurrently active outbound links allowed for the owning port. This number is the total link-activation limit minus the inbound link-activation limit (that part of the total limit reserved for active inbound links). This problem usually indicates an inconsistency in the network topology that may be transient (caused by a normal race condition) or permanent (indicated by logs 127 or 128). The session or application will fail with the specified sense code.

Recommended Action Check the consistency of the network topology.

Error Message

%SNASW-4-CS_LOG_37: EXCEPTION - [int] - Unable to activate dynamic link station because port total link-activation limit reached [chars]

Explanation A session required the SNA switch to activate a dynamic link station automatically, but the request failed because it would have exceeded the port total link-activation limit. This problem usually indicates an inconsistency in the network topology that may be transient (caused by a normal race condition) or permanent (indicated by logs 127 or 128). The session will fail with the specified sense code.

Recommended Action Check the consistency of the network topology.

Error Message

%SNASW-4-CS_LOG_38: EXCEPTION - [int] - Unable to activate dynamic link station because port outbound link-activation limit reached [chars]

Explanation A session required the SNA switch to activate a dynamic link station automatically, but the request failed because it would have exceeded the maximum number of concurrently active outbound links allowed for the owning port. This number is the total link-activation limit minus the inbound link-activation limit (that part of the total limit reserved for active inbound links). This problem usually indicates an inconsistency in the network topology that may be transient (caused by a normal race condition) or permanent (indicated by logs 127 or 128). The session will fail with the specified sense code.

Recommended Action Check the consistency of the network topology.

Error Message

%SNASW-6-CS_LOG_39: INFO - [int] - Link station to host started [chars]

Explanation A non-APPN link station to an upstream host has been successfully started.

Recommended Action No action is required.

Error Message

%SNASW-6-CS_LOG_40: INFO - [int] - Link station to DSPU started [chars]

Explanation A non-APPN link station to a downstream PU has been successfully started.

Recommended Action No action is required.

Error Message

%SNASW-6-CS_LOG_41: INFO - [int] - Link station to host stopped [chars]

Explanation A non-APPN link station to an upstream host has been successfully stopped.

Recommended Action No action is required.

Error Message

%SNASW-6-CS_LOG_42: INFO - [int] - Link station to DSPU stopped [chars]

Explanation A non-APPN link station to a downstream PU has been successfully stopped.

Recommended Action No action is required.

Error Message

%SNASW-4-CS_LOG_43: EXCEPTION - [int] - Unable to find requested link [chars]

Explanation A locally initiated dependent session activation request required the SNA switch to automatically activate a link to a specified PU name, but the SNA switch was unable to identify the a link to the PU. This problem indicates an inconsistent local configuration that is transient and is caused by a recent modification. The session activation request will fail with the specified sense code.

Recommended Action Check the consistency of the local configuration. Link definitions can be viewed by entering the **show snasw link** command.

Error Message

%SNASW-6-CS_LOG_44: INFO - [int] - SNA Switch link started [chars]

Explanation An SNA switch link has been successfully started.

Recommended Action No action is required.

Error Message

%SNASW-3-CS_LOG_51: PROBLEM - [int] - Intra-node session support ended abnormally [chars]

Explanation Intranode session support has ended abnormally. This condition should occur only because of a shortage of available storage. Any active intranode sessions will fail, and no more intranode sessions can be activated.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-CS_LOG_52: EXCEPTION - [int] - Unable to find requested connection network [chars]

Explanation A session required the SNA switch to activate a dynamic link station automatically, but the SNA switch was unable to identify the requested connection network TG. This problem usually indicates an inconsistency in the network topology that may be transient (caused by a normal race condition) or permanent (indicated by logs 127 or 128). The session will fail with the specified sense code.

Recommended Action Check the consistency of the network topology.

Error Message

%SNASW-3-CS_LOG_54: PROBLEM - [int] - Insufficient storage to generate link Alert [chars]

Explanation Available storage was insufficient for generating a link alert. The alert will not be sent.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-6-CS_LOG_55: INFO - [int] - HPR-capable SNA Switch link started [chars]

Explanation An SNA switch link has been successfully started on a node that supports HPR.

Recommended Action No action is required.

Error Message

%SNASW-6-CS_LOG_56: INFO - [int] - SNA Switch link stopped [chars]

Explanation An SNA switch link has been successfully stopped.

Recommended Action No action is required.

Error Message

%SNASW-6-CS_LOG_57: INFO - [int] - DLC started [chars]

Explanation A DLC has been successfully started.

Recommended Action No action is required.

Error Message

%SNASW-6-CS_LOG_58: INFO - [int] - DLC stopped [chars]

Explanation A DLC has been successfully stopped.

Recommended Action No action is required.

Error Message

%SNASW-6-CS_LOG_59: INFO - [int] - Port started [chars]

Explanation A port has been successfully started.

Recommended Action No action is required.

Error Message

%SNASW-6-CS_LOG_60: INFO - [int] - Port stopped [chars]

Explanation A port has been successfully stopped.

Recommended Action No action is required.

Error Message

%SNASW-4-CS_LOG_61: EXCEPTION - [int] - Unable to start requested CP-CP sessions with adjacent node [chars]

Explanation The specified link is configured to support CP-CP sessions, but these sessions could not be started. This condition could have occurred either because the remote node is not configured to support CP-CP sessions on this link or because both the local and remote nodes are end nodes. CP-CP sessions are not allowed to be started on end nodes. CP-CP sessions will not be established.

Recommended Action Correct the configuration mismatch, either by removing CP-CP sessions support from the local connection definition or by adding it to the connection definition of the adjacent node.

Error Message

%SNASW-3-CS_LOG_62: PROBLEM - [int] - Failed to create DLC [chars]

Explanation A DLC could not be started either because of insufficient resources or because the specified DLC type is not supported. The DLC is inoperative.

Recommended Action If the DLC type is supported, either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-CS_LOG_63: PROBLEM - [int] - Pre-defined TG number does not match that sent by adjacent node [chars]

Explanation The specified link station is configured with a predefined TG number, but the adjacent node has sent a different nonzero TG number. Link activation will fail.

Recommended Action Correct the mismatched TG number configuration at this node or at an adjacent node by entering the **snasw link** command.

Error Message

%SNASW-3-CS_LOG_64: PROBLEM - [int] - Adjacent node sent a TG number that was pre-assigned to another LS [chars]

Explanation An adjacent node has attempted to use for this link a TG number that is already defined on another link station. Link activation will fail.

Recommended Action Correct the mismatched TG number configuration at this node or at an adjacent node by entering the **snasw link** command.

Error Message

%SNASW-3-CS_LOG_65: PROBLEM - [int] - Adjacent node sent a TG number that was already in use by another LS [chars]

Explanation An adjacent node has attempted to use a TG number for this link that is already in use by another link station. This may indicate an interoperability problem. Link activation will fail.

Recommended Action Run a trace on the link station or port to get more diagnostic information on the problem and contact your Cisco technical support representative with the log and trace information.

Error Message

%SNASW-6-CS_LOG_66: INFO - [int] - Adjacent node has changed its CP name [chars]

Explanation An adjacent node has changed its CP name.

Recommended Action No action is required.

Error Message

%SNASW-3-CS_LOG_67: PROBLEM - [int] - Insufficient storage to update topology database with link station [chars]

Explanation Available storage was insufficient for updating the topology database with link station information. The topology will be inconsistent, and this condition may result in unexpected session activation failures (typically with the sense code 8014xxxx, 0806002B, or 08500001).

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch. Cycling the specified link station either by activating and then deactivating, or by deactivating then activating may clear the condition.

Error Message

%SNASW-3-CS_LOG_68: PROBLEM - [int] - Insufficient storage to update topology database with connection network [chars]

Explanation Available storage was insufficient for updating the topology database with connection network information. The topology will be inconsistent, and this condition may result in unexpected session activation failures (typically with the sense code 8014xxxx, 0806002B, or 08500001).

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch. Cycling the specified port either by activating and then deactivating, or by deactivating then activating may clear the condition.

Error Message

%SNASW-3-CS_LOG_69: PROBLEM - [int] - Insufficient storage to enable intra-node sessions [chars]

Explanation Available storage was insufficient for enabling intranode sessions. Intranode session cannot be activated.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-6-CS2_LOG_0: INFO - [int] - Implicit link limit on port reached [chars]

Explanation An implicit, dynamic, or discovery link could not be activated because the implicit link limit defined on the port has been reached or exceeded. The link type being activated is as follows:

- 1—dynamic
- 3—implicit
- 4—discovery

Recommended Action No action is required.

Error Message

%SNASW-4-CS2_LOG_2: EXCEPTION - [int] - Link activation race detected - local node responsible for disconnect [chars]

Explanation A link activation race was detected on an ATM port. The local node is responsible for resolving this race. The local node will disconnect its link. The link activation request made by the remote node will succeed.

Recommended Action This is a normal race condition. No action is required.

Error Message

%SNASW-4-CS2_LOG_3: EXCEPTION - [int] - Link activation race detected - adjacent node responsible for disconnect [chars]

Explanation A link activation race was detected on an ATM port. The remote node is responsible for resolving this race. The local node will send a negotiation error CV indicating that the remote link activation request should fail. The link activation request made by the local node will succeed.

Recommended Action This is a normal race condition. No action is required.

Error Message

```
%SNASW-4-CS2_LOG_4: EXCEPTION - [int] - PORT_BANDWIDTH_UPDATE (status = QUIESCING)
received [chars]
```

Explanation A PORT_BANDWIDTH_UPDATE signal with status set to QUIESCING has been received. Any Connection Network TGs on this port will be advertised as quiescing. Any TGs that can normally be activated automatically will be advertised as nonoperational.

Recommended Action If possible, increase the bandwidth available to the local port.

Error Message

```
%SNASW-4-CS2_LOG_5: EXCEPTION - [int] - PORT_BANDWIDTH_UPDATE (status = OK)
received [chars]
```

Explanation A PORT_BANDWIDTH_UPDATE signal with status set to OK has been received. Any Connection Network TGs on this port that had been advertised as quiescing will be advertised as active. Any TGs that can normally be activated automatically that had been advertised as nonoperational will be advertised as operational.

Recommended Action To avoid future problems with bandwidth shortage, increase the bandwidth available to the local port.

Error Message

```
%SNASW-3-CS2_LOG_9: PROBLEM - [int] - DLC failure during creation [chars]
```

Explanation The DLC has returned inconsistent data during creation. The DLC will be destroyed, and all ports and link stations defined on the DLC will be inoperative.

Recommended Action Run a trace on the DLC and contact your Cisco technical support representative with the log and trace information.

Error Message

```
%SNASW-4-CS2_LOG_10: EXCEPTION - [int] - Link activation retry limit reached
[chars]
```

Explanation An automatic retry link station is still inactive after the maximum allowed number of retries. The link station will remain inactive awaiting operator intervention. In the meantime, the activation of any sessions relying on this link station will fail.

Recommended Action Check the surrounding logs for link activation failures. Check the configuration of the link station. Check the state of the adjacent node. Enter the **snasw start link** command to retry activation.

Error Message

%SNASW-4-CS2_LOG_11: EXCEPTION - [int] - A request to activate a connection network TG was rejected because the local and destination link addresses were incompatible [chars]

Explanation The SNA switch cannot start a link to an adjacent node over a connection network TG because the link address on the local node is not compatible with the link address on the adjacent node. The session will fail with the specified sense code.

Recommended Action Check the local and destination link addresses.

Error Message

%SNASW-4-CS2_LOG_12: EXCEPTION - [int] - A request to activate a connection network TG was rejected because a defined link was already active between the local and destination address and multiple links are not supported [chars]

Explanation The SNA switch cannot start a link to an adjacent node over a connection network TG because the DLC does not support multiple links between the local and destination addresses. The session will fail with the specified sense code.

Recommended Action Check the local and destination link addresses.

Error Message

%SNASW-4-CS2_LOG_25: EXCEPTION - [int] - Insufficient resources to (un)register adjacent LEN [chars]

Explanation A branch network node has insufficient resources to register or unregister an adjacent LEN node. The directory of this node and that of its NNS may become inconsistent because the LEN CP will still be present when it should not be present, or vice versa. Therefore, session activation to the LEN may fail when a link to it is active, or neighboring nodes may show the LEN as able to be contacted when the link to it is down.

Recommended Action Ensure that sufficient resources are available to the SNA switch and then recycle the link to the required state.

Error Message

%SNASW-4-CS2_LOG_26: EXCEPTION - [int] - Invalid TG descriptor received from DLUS [chars]

Explanation An invalid TG descriptor was received from a DLUS. The PU will not be activated.

Recommended Action Check the configuration of the DLUS named by this log. Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-CS2_LOG_27: EXCEPTION - [int] - A DLUS-defined downstream DLUR-served link could not be defined [chars]

Explanation A DLUS-defined downstream DLUR-served link could not be defined because either the specified port does not exist or there is an existing link station to the same destination address. The PU will not be activated.

Recommended Action Correct the configuration.

Error Message

%SNASW-4-CS2_LOG_28: EXCEPTION - [int] - A DLUS-defined downstream DLUR-served link failed to activate [chars]

Explanation A DLUS-defined downstream link failed to activate. The PU will not be activated.

Recommended Action Check that the named port is active. Check that the downstream node at the given address is powered on. Check surrounding logs for reasons why the named LS has not activated. Check the configuration of the DLUS.

Error Message

%SNASW-4-CS2_LOG_29: EXCEPTION - [int] - DLUS-defined DSPU name clashes with locally-defined DSPU name [chars]

Explanation A DLUS-defined DSPU name clashes with the locally-defined DSPU name of a different PU. An implicit link will fail. The ACTPU for the DSPU connected over this link will be rejected.

Recommended Action Reconfigure this node or the DLUS to remove the duplicate PU name. If the DLUS and the DLUR use the same PU name, then it must refer to the same PU.

Error Message

%SNASW-4-CS2_LOG_30: EXCEPTION - [int] - Insufficient information to create a DLUS-defined link to a DLUR DSPU [chars]

Explanation Insufficient information was available to create a DLUS-defined link. A PU will not be activated. The ACTPU for the named PU will be rejected with the given sense code.

Recommended Action Correct the PU definition at the DLUS. The DLUS-defined link could not be created using the information from the DLUS in the TG descriptor (CV x'46') shown below.

For example, for a Token Ring link to be created, the SNA switch requires the x'46' to contain the following subfields:

- x'91'—Signaling information CV specifying EBCDIC 'TR'
- x'92'—Port identifier containing an 8-byte EBCDIC port name
- x'93'—LSAP information containing a 1-byte destination SAP address
- x'94'—MAC information containing a 6-byte destination MAC address

Error Message

%SNASW-3-DLCBadMessage: DLC unrecognized message, header= [chars]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-DLCFailure: SNASW failed to process DLC message, header= [chars]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-DLCInvalidFsmState: Invalid Input=[chars] to SNASW [chars] [hex] with OldState=[chars]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-DLCPortFailure: Port [chars] activation failed: [chars]

Explanation An error has been received from CLS. This condition typically indicates a configuration error.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-DLUR_LOG_1: EXCEPTION - [int] - UNBIND could not be correlated to DLUR-served LU [chars]

Explanation The system is unable to correlate a received UNBIND request with a DLUR-supported session. This is a normal race condition caused by the crossing of UNBIND requests.

Recommended Action No action is required. A positive response will be sent to UNBIND.

Error Message

%SNASW-3-DLUR_LOG_2: PROBLEM - [int] - REQACTPU rejected [chars]

Explanation A DLUS has rejected a REQACTPU with the given sense code. An SSCP-PU session with the given DLUS will not be activated. If a backup DLUS is configured for the PU, a DLUR will attempt to activate the PU via the backup DLUS.

Recommended Action Examine the sense code and retry activation if appropriate.

Error Message

%SNASW-4-DLUR_LOG_5: EXCEPTION - [int] - CPSVRMGR pipe session failure [chars]

Explanation A CPSVRMGR pipe has failed to the specified DLUS. Any PUs using the specified DLUS are deactivated, and a DACTPU(cold) is sent. The DLUR may attempt to contact one or more backup DLUSs, if configured.

Recommended Action If a pipe with backup DLUS is not initiated automatically, manually restart any required PUs.

Error Message

%SNASW-4-DLUR_LOG_8: EXCEPTION - [int] - Inconsistent DLUS Names [chars]

Explanation The DLUS names are inconsistent. The host has requested the activation of a downstream link to a PU by sending an ACTPU. The link is configured to request a different DLUS. The DLUS initiating the activation is used.

Recommended Action No action is required. If the host DLUS is the regular DLUS and not a backup, adjust the downstream link configuration at a convenient time.

Error Message

%SNASW-4-DLUR_LOG_9: EXCEPTION - [int] - Protocol Error from DLUS Host: RU Size too large for SSCP Session [chars]

Explanation A protocol error from a DLUS has occurred. The system has received an RU that is too large for SSCP session. This situation typically occurs when the SSCP sends a LOGON screen that is too large. The data is discarded.

Recommended Action If you are expecting an SSCP LOGON screen, enter your LOGON command as usual.

Error Message

%SNASW-4-DLUR_LOG_10: EXCEPTION - [int] - Failed to contact a DLUS for PU. Retry count exceeded. [chars]

Explanation The DLUR has failed to contact either the DLUS or the backup or default DLUSs after the system has attempted the configured number of retries. No contact is made with the DLUS.

Recommended Action Check the earlier logs for causes of individual failures to contact the host. Resolve any problems or increase the timeout or retry count and try again.

Error Message

%SNASW-3-DLUR_LOG_11: PROBLEM - [int] - Received PLU-SLU BIND request with duplicate FQPCID [chars]

Explanation The system has received a PLU-SLU BIND request with duplicate FQPCID. The session activation will fail with the sense code 083B0002.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information. Run a trace on the specified link if more diagnostics are required.

Error Message

%SNASW-6-DLUR_LOG_12: INFO - [int] - A pipe to a DLUS has activated [chars]

Explanation A pipe to a DLUS has been activated.

Recommended Action No action is required.

Error Message

%SNASW-6-DLUR_LOG_13: INFO - [int] - A pipe to a DLUS has deactivated [chars]

Explanation A pipe to a DLUS has been deactivated.

Recommended Action No action is required.

Error Message

%SNASW-4-DLUR_LOG_14: EXCEPTION - [int] - An attempt to activate a persistent pipe to a DLUS has failed [chars]

Explanation A DLUR has requested a persistent pipe to a DLUS, but the DLUS does not support persistent pipes. The sense codes are as follows:

- 088E0009—The DLUR has failed the pipe activation because it requires all pipes to be persistent.
- 08A0000C—The DLUS has failed the pipe activation because there is no PU needing service.

The attempt to activate a persistent pipe to the DLUS will fail.

Recommended Action If the DLUR is unable to contact a different DLUS that does support persistent pipes, then the following should be considered. If the sense code is 088E0009, DLUR requirements for persistent pipes could be removed. Otherwise, the DLUS must be upgraded to support persistent pipes.

Error Message

%SNASW-4-DLUR_LOG_15: EXCEPTION - [int] - A DLUS has sent an ACTPU without a PU name [chars]

Explanation A DLUS has sent an ACTPU without a PU name. The ACTPU will be rejected with the specified sense code. PU activation will not continue.

Recommended Action Check the status of the named DLUS. Check that the named DLUS is correctly configured. Optionally, reconfigure the SNA switch to use a different DLUS.

Error Message

%SNASW-4-DLUR_LOG_16: EXCEPTION - [int] - A DLUS has sent an ACTPU with a PU name that is already in use [chars]

Explanation A DLUS has sent an ACTPU with a PU name that is already in use. The ACTPU will be rejected with the specified sense code. PU activation will not continue.

Recommended Action Reconfigure the DLUS or the DLUR to use different PU names. If the DLUS and the DLUR use the same PU name, then they must apply the name to the same PU.

Error Message

%SNASW-4-DLUR_LOG_17: EXCEPTION - [int] - A DLUS has sent an ACTPU with a PU name different from the name in the last ACTPU received for the same DSPU. [chars]

Explanation A DLUS has sent an ACTPU with a PU name that is different from the PU name in the last ACTPU received for the same DSPU. The PU name of this implicit or DLUS-defined DSPU will change its name to the name from this new ACTPU.

Recommended Action Reconfigure the DLUS or DLUSs in the network to use the same PU name when referring to the same PU.

Error Message

%SNASW-4-DLUR_LOG_18: EXCEPTION - [int] - Failed to contact one or both of the default DLUS when attempting to activate a persistent pipe required by a DLUS-dependent port. The retry count is exceeded. [chars]

Explanation The DLUR has failed to contact either the default primary DLUS, the default backup DLUS, or both after the configured number of retries when attempting to activate a persistent pipe required to enable a DLUS-dependent port. The DLUS-dependent port is not enabled.

Recommended Action Check earlier logs for causes of individual failures to contact the host. Resolve any problems or increase the timeout or retry count and try again.

Error Message

%SNASW-6-DLUR_LOG_19: INFO - [int] - Deactivating a persistent pipe because it is not required [chars]

Explanation The DLUR is deactivating a persistent pipe because it is not required to keep it active.

Recommended Action No action is required.

Error Message

%SNASW-4-DLUR_LOG_20: EXCEPTION - [int] - Invalid MU type received by DLUR [chars]

Explanation An invalid MU type has been received by a DLUR from an internal or downstream PU. The invalid MU will be discarded.

Recommended Action If the PU is internal, contact your Cisco technical support representative with details of this log. If the PU is downstream, contact the supplier of the downstream node.

Error Message

%SNASW-4-DLUR_LOG_21: EXCEPTION - [int] - Different PUs have LUs whose names clash [chars]

Explanation Two LUs having the same name exist under different PUs. One is already activated, and DLUS has attempted to activate the other. The second LU will not be activated.

Recommended Action Rename one of the LUs with a unique network name.

Error Message

%SNASW-4-DS2_LOG_0: EXCEPTION - [int] - Insufficient resources to (un)register adjacent LEN [chars]

Explanation The branch network node has insufficient resources to register or unregister an adjacent LEN node. The directory of this node and that of its NNS may become inconsistent because the LEN CP will still be present when it should not be or vice versa. Therefore, session activation to the LEN may fail when a link to it is active, or neighboring nodes may believe the LEN to be contactable when the link to is down.

Recommended Action Ensure that sufficient resources are available to the SNA switch and recycle the link to the required state.

Error Message

%SNASW-3-DS_LOG_1: PROBLEM - [int] - Network search not started because it would exceed the maximum number of concurrent locates supported by this node [chars]

Explanation A network search has not started because it would exceed the maximum number of concurrent locates that are supported by this node. The session activation will fail with the specified sense code.

Recommended Action Collect the trace information and report the problem to your Cisco technical support representative.

Error Message

```
%SNASW-4-DS_LOG_2. : EXCEPTION - [int] - Locate search failed: search error
[chars]
```

Explanation A network search for which this node was the originator or the network node server has failed. The most common sense codes are as follows (the sense code is an amalgam of sense codes received from the various nodes that took part in the search):

- 08900060—Insufficient storage to process a locate search.
- 08900010—Routing error on a directed locate search.
- 08900070—Session outage in the search tree.
- 0812000A—Insufficient resources at the CDS.

These sense codes usually indicate a transient problem in the network (either a resource shortage or link failure). The session activation will fail with the specified sense code.

Recommended Action Retry the session activation. If the problem persists, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SNASW-3-DS_LOG_3: PROBLEM - [int] - Received badly formed Locate from an adjacent
node [chars]
```

Explanation The system has received a badly formed Locate request from an adjacent node. This condition may indicate an interoperability problem. Sense codes are as follows:

- 1010B080—Missing command parameters control vector in Found GDS variable.
- 10140080—GDS variable or control vector length error.
- 1014A082—Missing search argument directory entry in Find GDS variable.

CP-CP sessions with the adjacent node will be deactivated with the specified sense code.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SNASW-3-DS_LOG_4: PROBLEM - [int] - Insufficient storage to process Locate
received from adjacent node [chars]
```

Explanation Available storage was insufficient for processing a locate request that was received from the adjacent node. CP-CP sessions with the adjacent node will be deactivated to avoid possible deadlocks.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-DS_LOG_5: EXCEPTION - [int] - Received Locate with no Find GDS variable [chars]

Explanation A locate request has been received with no Find GDS variable. The locate request is discarded.

Recommended Action No action is required.

Error Message

%SNASW-3-DS_LOG_9: PROBLEM - [int] - Insufficient storage for CP-CP sessions [chars]

Explanation Available storage is insufficient for CP-CP sessions. CP-CP sessions will be deactivated with the specified sense code.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-DS_LOG_10: EXCEPTION - [int] - CP-CP sessions deactivated while broadcast Locate outstanding [chars]

Explanation CP-CP sessions have been deactivated while a broadcast locate was in process. Session activation may fail.

Recommended Action This log flags that a session failure impacted a pending broadcast locate. Other more specific logs give reasons for the session failure and appropriate actions.

Error Message

%SNASW-3-DS_LOG_11: PROBLEM - [int] - Received registration or deletion request from an unknown end node [chars]

Explanation The system has received a registration or deletion request from an unknown end node. This condition may indicate an interoperability problem, but is not considered fatal. The registration request is discarded.

Recommended Action No action is required.

Error Message

%SNASW-3-DS_LOG_12: PROBLEM - [int] - Insufficient storage to register resources owned by a served end node [chars]

Explanation Available storage was insufficient for registering resources owned by a served end node. The specified resource will not be registered, and the registration request has been rejected. Network searches for the resource may fail if the end node is unable to register it.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-DS_LOG_13: PROBLEM - [int] - Resource registration failure: resource already registered [chars]

Explanation The system has failed to register a resource for a served end node because the resource is already registered, but with a different parent resource. This situation typically occurs when the same LU is defined on two or more end nodes. The registration request is rejected, and as a result other resources may not be registered and subsequent network searches may fail.

Recommended Action Remove or rename the LU on one of the end nodes.

Error Message

%SNASW-3-DS_LOG_14: PROBLEM - [int] - Registration failure notification received from network node server is badly formed [chars]

Explanation The registration failure GDS variable received from the network node server is badly formed. This condition may indicate an interoperability problem. CP-CP sessions to the node will be deactivated.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-DS_LOG_15: PROBLEM - [int] - Link/session failure while registering resources with network node server [chars]

Explanation A link or session failure occurred while resources were being registered with the network node server. CP-CP sessions to the node will be deactivated.

Recommended Action This log flags that a registration request was disrupted by the link or session failure. Other more specific logs give details on the reasons for the failure and suggest appropriate actions.

Error Message

%SNASW-3-DS_LOG_17: PROBLEM - [int] - Protocol error while registering resources with network node server [chars]

Explanation A protocol error occurred while resources were being registered with the network node server. CP-CP sessions to the node will be deactivated.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-DS_LOG_18: EXCEPTION - [int] - Locate search timed out [chars]

Explanation A local node has timed out while waiting for a Locate response from the specified adjacent node. This condition typically indicates a problem in another node in the network that is not responding to Locates, possibly because only one CP-CP session is active with an adjacent node. The Locate will fail with the specified sense code, which is one of the following:

- 08120010—The adjacent CP is short of resources. CP-CP sessions will be deactivated.
- 08900060—Search failure: the adjacent CP does not have sufficient resources (CP-CP sessions will not be deactivated).

Recommended Action Verify that no node in the network has a single CP-CP session active to an adjacent node.

Error Message

%SNASW-3-DS_LOG_21: PROBLEM - [int] - Served end node attempted to delete a home directory entry [chars]

Explanation A served end node has attempted to delete a directory entry that is defined as a home entry at this node. This situation normally occurs when the **snasw location** command has been used to define LUs owned by served end or LEN nodes. The delete request is rejected with the specified sense code.

Recommended Action Enter the **no snasw location** command to remove the home entry from the directory.

Error Message

%SNASW-4-DS_LOG_22: EXCEPTION - [int] - Served end node attempted to delete a non-existent directory entry [chars]

Explanation A served end node has attempted to delete a directory entry that does not exist. This condition is normally caused by a network race condition that causes the delete request to arrive when the resource has not been registered. The delete request is rejected with the specified sense code.

Recommended Action No action is required.

Error Message

%SNASW-3-DS_LOG_23: PROBLEM - [int] - Served end node attempted to delete a resource it doesn't own [chars]

Explanation A served end node has attempted to delete a resource when it was not registered as the owner of the resource. This condition may indicate an interoperability problem. The Delete request is rejected with the specified sense code. This result may cause the end node to deactivate CP-CP sessions.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-DS_LOG_24: PROBLEM - [int] - Received Register/Delete GDS variable containing format errors [chars]

Explanation The system has received from a served end node a Register or Delete GDS variable that contained format errors. Sense codes are as follows:

- 08950000—GDS variable or control vector length error.
- 10140080—Invalid control vector Register or Delete attempt is rejected.

The resources specified will not be registered.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-DS_LOG_26: PROBLEM - [int] - Unable to register resources because this node is not authorised at the network node server [chars]

Explanation The network node server has rejected a Register request with a sense code indicating that this node is not authorized to register resources at the network node. This condition usually indicates a mismatch between the configuration of the network node server (to consider this end node unauthorized) and the configuration of this node (to register resources). No further resource registration will occur until CP-CP sessions have been deactivated and reestablished.

Recommended Action Modify the network node server configuration to consider this node authorized.

Error Message

%SNASW-3-DS_LOG_27: PROBLEM - [int] - Unable to register resources because the network node server's directory is full [chars]

Explanation A resource registration failed because the directory of the network node server is full. This condition may indicate a shortage of storage at the network node or a configured upper bound on the size of its directory. No further resource registration will occur until CP-CP sessions have been deactivated and reestablished.

Recommended Action Increase the size of the directory at the network server. This action may be a simple configuration change, or it may require freeing up storage by reducing the load at the server.

Error Message

%SNASW-3-DS_LOG_28: PROBLEM - [int] - Resource registration failed because the resource conflicted with an existing entry in the network node's directory [chars]

Explanation A resource registration has failed because the resource conflicted with existing resources in the directory of the network node server. This condition most commonly occurs when two LUs having the same name are defined on two different end nodes that are being served by the same

network node. This condition may also occur if the network node has a home directory entry defined for the same resource. Registration of the resource in question will fail, but other resources should still be registered correctly.

Recommended Action Check the directory of the network node for the duplicate entry. If the duplicate entry is a home entry, remove the home entry from the directory. If the duplicate entry is a registered entry that is owned by a different end node, redefine the LU to use a different name.

Error Message

%SNASW-3-DS_LOG_29: PROBLEM - [int] - Resource registration failed because network node server detected a protocol error in the Register request [chars]

Explanation A resource registration has failed because the network node server detected a protocol error in the Register request. This condition may indicate an interoperability problem. Registration of the resource in question will fail, but other resources should still be registered correctly.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-DS_LOG_30: PROBLEM - [int] - Resource registration failed with an unknown sense code [chars]

Explanation A resource registration has failed with an unknown sense code. This condition may indicate an interoperability problem. No further resource registration will occur until CP-CP sessions have been deactivated and reestablished.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-DS_LOG_31: PROBLEM - [int] - Delete failure reply received with sense code that is unrecoverable [chars]

Explanation A Delete reply has been received with an unrecoverable sense code. CP-CP sessions to the node will be deactivated.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-DS_LOG_32: PROBLEM - [int] - Unable to correlate received Register or Delete reply to a directory entry [chars]

Explanation A directory error correlator was returned on a register, or a delete reply cannot be correlated to a directory entry. This condition is considered a protocol error and may indicate an interoperability problem. CP-CP sessions to the node will be deactivated.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-DS_LOG_33: PROBLEM - [int] - Unable to delete resources because this node is not authorised at the network node server [chars]

Explanation The network node server has rejected a delete request with a sense code indicating that this node is not authorized to register resources at the network node. This situation usually indicates a mismatch between the configuration of the network node server (to consider this end node unauthorized) and the configuration of this node (to register resources). No further resource registration or deletion will occur until CP-CP sessions have been deactivated and reestablished.

Recommended Action Modify the network node server configuration to consider this node authorized.

Error Message

%SNASW-4-DS_LOG_34: EXCEPTION - [int] - Delete request failed because the resource was not found or not removable [chars]

Explanation A delete request has failed, either because the entry was defined as a home entry at the network node server or because the resource was not found. Neither error is severe, and neither will affect future registration, deletion, or other aspects of network operation. Further deletion and registration will continue unaffected.

Recommended Action No action is required.

Error Message

%SNASW-4-DS_LOG_35: EXCEPTION - [int] - Register GDS variable received with an invalid resource name [chars]

Explanation A resource name in the received register request is invalid. The register request will fail.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-DS_LOG_36: EXCEPTION - [int] - Central Resource Registration failure [chars]

Explanation A central resource registration failure has occurred. Network performance may degrade because of additional broadcast Locate searches.

Recommended Action No action is required.

Error Message

%SNASW-4-DS_LOG_37: EXCEPTION - [int] - Central Resource Registration failure: invalid correlator received [chars]

Explanation A central resource registration failure has occurred. An invalid correlator has been received. Network performance may degrade because of additional broadcast locate searches.

Recommended Action No action is required.

Error Message

%SNASW-6-DS_LOG_38: INFO - [int] - Central Directory Server located [chars]

Explanation The central directory server has been located.

Recommended Action No action is required.

Error Message

%SNASW-3-DS_LOG_40: PROBLEM - [int] - Locate received from adjacent node exceeded the maximum number of concurrent locates supported by this node [chars]

Explanation A locate has been received from an adjacent node that exceeded the maximum number of concurrent locates that are supported by this node. CP-CP sessions with the adjacent node will be deactivated to avoid possible deadlocks.

Recommended Action The network will recover from this problem and CP-CP sessions will be reactivated. If the problem persists, collect trace information and report it to a Cisco technical support representative.

Error Message

%SNASW-3-DS_LOG_41: PROBLEM - [int] - Insufficient storage to start a network search [chars]

Explanation Available storage was insufficient for starting a network search. The session activation will fail with the specified sense code.

Recommended Action Make more resources available to the SNA switch.

Error Message

%SNASW-3-DS_LOG_42: PROBLEM - [int] - CP-CP sessions deactivated while directed Locate outstanding [chars]

Explanation CP-CP sessions are deactivated while the directed locate is in process. Session activation may fail.

Recommended Action This log flags that a session failure impacted a pending directed locate. Other, more specific logs give reasons for the session failure and appropriate actions.

Error Message

%SNASW-6-DS_LOG_43: INFO - [int] - Locate search failed: LU not found [chars]

Explanation A network search for which this node was the originator or the network node server has failed to locate the target LU. This condition may be caused by an incorrect target LU name, an inoperative target system, or link errors in the backbone of the network. The session activation will fail with the specified sense code.

Recommended Action If the target LU name is correct, check that the system on which the LU is defined is active. If the system is active, check the topology of the network to ensure that the target system or its network node server is reachable from this node.

Error Message

%SNASW-4-DS_LOG_44: EXCEPTION - [int] - CP-CP sessions established with end node: invalid directory entry removed [chars]

Explanation CP-CP sessions have been established with an adjacent end node that was previously defined using the **snasw location** command. The invalid directory definitions for the end node and any of its LUs will be removed.

Recommended Action Do not configure the invalid entries in the future.

Error Message

%SNASW-3-DS2_LOG_1: PROBLEM - [int] - Inaccurate directory entry held for this LU [chars]

Explanation A directed locate for this LU has been tried, but the LU was not recognized at the end node stored in the directory. The directory entry is removed, and a broadcast locate is sent instead.

Recommended Action No action is required.

Error Message

%SNASW-4-DS2_LOG_2: EXCEPTION - [int] - Failed to register resource with NNS/CDS [chars]

Explanation The system has failed to allocate memory for storage of a resource in the register list. Registration will not take place immediately.

Recommended Action No action is required.

Error Message

%SNASW-4-DS2_LOG_3: EXCEPTION - [int] - Received a Locate reply with an invalid RSCV [chars]

Explanation A locate reply has been received that contained an invalid RSCV. The locate request that solicited the reply may have failed.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-DS2_LOG_4: EXCEPTION - [int] - Insufficient resources to register adjacent LEN LU [chars]

Explanation A branch network node has insufficient resources to register the LU of an adjacent LEN node. The directory of this node and/or that of its NNS may become inconsistent because the LEN LU will not be registered when it should be. Therefore, session activation to the LEN LU may fail when a link to it is active.

Recommended Action Ensure that sufficient resources are available to the SNA switch, and then recycle the link to the required state.

Error Message

%SNASW-3-DS2_LOG_5: PROBLEM - [int] - LEN LU registration failed because the LU name is already registered as the child of a different CP [chars]

Explanation The node has been configured to register LEN LU names when BINDs from LEN nodes are passed through. In this case, registration failed because of a resource name conflict. The LU name is already registered as the child of a different CP. Registration of the resource in question will fail, so sessions to the LEN LU cannot be started except by the LEN itself. Other resources should still be registered correctly.

Recommended Action Check the directory of the network node directory for the duplicate entry. If it is a home entry, remove the home entry from the directory. If it is a registered entry owned by a different end node, redefine the LU to use a different name.

Error Message

%SNASW-3-EVENT: [chars]

Explanation This message indicates that an informational event has occurred.

Recommended Action No action is required.

Error Message

%SNASW-4-HPR_LOG_0: EXCEPTION - [int] - HPR Route Setup RU received with format errors [chars]

Explanation An HPR Route Setup RU has been received with format errors. The message cannot be processed and will be discarded.

Recommended Action Report the error to the remote end.

Error Message

%SNASW-4-HPR_LOG_1: EXCEPTION - [int] - Unable to correlate HPR Route Setup RU [chars]

Explanation The system is unable to correlate an HPR route setup reply. The message cannot be processed and will be discarded.

Recommended Action Report the error to the remote end.

Error Message

%SNASW-3-HPR_LOG_2: PROBLEM - [int] - Unable to activate RTP connection [chars]

Explanation The system is unable to activate the RTP connection. In certain situations, the origin may retry activation.

Recommended Action Examine the sense code and retry activation, if appropriate.

Error Message

%SNASW-4-HPR_LOG_3: EXCEPTION - [int] - Link failure caused HPR route setup request to be dropped [chars]

Explanation A link failure has occurred between this node and the source of the route setup request. The route setup request is dropped by this node. The partner node on that link should generate a negative reply.

Recommended Action Investigate the link failure.

Error Message

%SNASW-4-HPR_LOG_4: EXCEPTION - [int] - HPR manager failed to obtain memory to send indication [chars]

Explanation The HPR manager failed to get memory to send an RTP indication. The data_lost flag will be set in the next successfully sent indication.

Recommended Action Investigate the memory shortage.

Error Message

%SNASW-4-HPR_LOG_5: EXCEPTION - [int] - NLP received with format errors [chars]

Explanation An NLP has been received with format errors. The message cannot be processed and will be discarded.

Recommended Action Report the error to the remote end.

Error Message

%SNASW-4-HPR_LOG_6: EXCEPTION - [int] - NLP received for RTP connection which no longer exists [chars]

Explanation An NLP has been received for an RTP connection that no longer exists. The message cannot be processed and will be discarded.

Recommended Action Report the error to the remote end.

Error Message

%SNASW-4-HPR_LOG_8: EXCEPTION - [int] - Connection Setup NLP received for previous NCE instance [chars]

Explanation A connection setup NLP has been received that specified a previous instance of this NCE. The NCE must have been shut down and restarted since processing the route setup request. No RTP connection can be started; therefore, the NLP will be discarded.

Recommended Action Report the error to the remote end.

Error Message

%SNASW-4-HPR_LOG_9: EXCEPTION - [int] - Local node has received a HPR Route Setup RU that it cannot forward because the next hop is not HPR-capable so is replying with the backout sense code [chars]

Explanation The local node has received an HPR Route Setup RU that it cannot forward because the next hop in the route is not HPR-capable. The local node does not support RTP, so the local node cannot act as the destination node and replies with the backout sense code. The route setup between the origin node and the destination will fail. RTP connections cannot be activated between these two nodes. This is a normal condition when the local node has a link that is able to be automatically activated to a node that does not support HPR. An intermediate node in the route that supports RTP might be able to take over the role of the destination node for the route setup. If this situation occurs, sessions that originate at or beyond the origin node will use HPR from the origin to the new destination and use ISR from the new destination to the local node and beyond it. If no intermediate node is able to act as the destination, HPR will not be used at all by such sessions.

Recommended Action No action is required.

Error Message

%SNASW-4-HPR_LOG_10: EXCEPTION - [int] - Local node has received a HPR Route Setup RU that it cannot forward because the next hop is not HPR-capable so is acting as the new destination [chars]

Explanation The local node has received an HPR Route Setup RU that it cannot forward because the next hop in the route is not HPR-capable. The local node supports RTP, so the local node can act as the destination. The Route Setup will be between the origin node and the local node, which is the new destination. RTP connections will be activated between these two nodes. This is a normal event when the local node has a link that is able to be automatically activated to a node that does not support RTP. Sessions that originate at or beyond the origin node will use HPR from the origin to the new destination and use ISR from the new destination and beyond it.

Recommended Action No action is required.

Error Message

%SNASW-4-HPR_LOG_11: EXCEPTION - [int] - The local node is acting as the new destination for a backed-out Route Setup [chars]

Explanation The local node has received an HPR Route Setup Reply that contains the backout sense code and is able to act as the new destination for the Route Setup. The Route Setup has been successfully backed out. The Route Setup is between the origin node and the local node (the new destination). RTP connections will be activated between these two nodes. This is a normal event when a node in the route has a link that is able to be automatically activated to a node that does not support RTP or HPR. Sessions that originate at or beyond the origin node will use HPR from the origin node to the new destination and use ISR from the new destination and beyond it.

Recommended Action No action is required.

Error Message

%SNASW-4-HPR_LOG_12: EXCEPTION - [int] - A Route Setup has been backed out from the original destination to the new destination [chars]

Explanation The local node has received an HPR Route Setup Reply in which the destination node is not the same as the destination node that was in the corresponding route setup request. The route setup has successfully backed out. The route setup is between the origin node and the new destination. RTP connections will be activated between these two nodes. This is a normal event when a node in the route has a link that is able to be automatically activated to a node that does not support RTP or HPR. Sessions that originate at or beyond the local node will use HPR from the local node to the new destination and use ISR from new destination and beyond it.

Recommended Action No action is required.

Error Message

%SNASW-4-HPR_LOG_13: EXCEPTION - [int] - A Route Setup Reply has been received with the backout sense code HPR will not be used for this session [chars]

Explanation The local node has received an HPR route setup reply with the backout sense code. The route setup has failed because the destination node does not support RTP. No intermediate node supports RTP and was able to become the new destination. The route setup has failed and HPR will not be used for the session that is being activated. This is a normal event when a node in the route has a link that is able to be automatically activated to a node that does not support RTP or HPR.

Recommended Action No action is required.

Error Message

%SNASW-4-HPR_LOG_14: EXCEPTION - [int] - Local node is the destination of a HPR Route Setup RU but does not support RTP so is replying with the backout sense code [chars]

Explanation The local node has received an HPR route setup RU as the destination node but cannot accept the RU because the local node does not support RTP. The local node replies with the backout sense code. The Route Setup between the origin node and this node will fail. RTP connections cannot be activated between these two nodes. This is a normal event when another HPR-capable node has a link that is able to be automatically activated to this node. It may be possible for an intermediate node in the route that supports RTP to take over the role of the destination node for the route setup. If this condition occurs, sessions that originate at (or beyond) the origin node will use HPR from the origin to the new destination and use ISR from the new destination to the local node and beyond it. If no intermediate node is able to act as the destination, HPR will not be used at all by such sessions.

Recommended Action No action is required.

Error Message

%SNASW-4-HPR_LOG_15: EXCEPTION - [int] - Remote NCE has restarted, so disconnect this RTP connection with previous instance of that NCE [chars]

Explanation A connection setup NLP has been received from a remote NCE that has shut down and restarted. An RTP connection still exists from that NCE before it shut down. The old RTP connection will be disconnected.

Recommended Action No action is required.

Error Message

%SNASW-4-HPR_LOG_16: EXCEPTION - [int] - Unable to activate Route Setup RTP connection [chars]

Explanation The system was unable to activate a Route Setup RTP connection during the processing of a Route Setup Request. The Route Setup Request will fail with the specified sense code. The next route setup request will trigger another attempt to activate the route setup RTP connection.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-HPR_LOG_17: EXCEPTION - [int] - Connection Setup NLP rejected because it specified unsupported Topic ID [chars]

Explanation A connection setup NLP was rejected because it specified the CP-CP session or route setup topic ID, but was received on a TG that does not support the Control Flows over an RTP Tower. The CP-CP session or Route Setup RTP connection will fail with the sense code HA0010017.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-HPR_LOG_18: EXCEPTION - [int] - HPR Route Setup RU received with existing FQPCID [chars]

Explanation An HPR Route Setup RU has been received with an FQPCID that matches an existing route. The message will be rejected and the route not established.

Recommended Action Report the error to the remote end.

Error Message

%SNASW-4-HS_LOG_0: EXCEPTION - [int] - CRV exchange failed [chars]

Explanation The CRV exchange has failed. This condition indicates that the cryptography keys configured at this LU and the partner LU are inconsistent. The session will be deactivated with the sense code 08350001.

Recommended Action Use the information on the session deactivated problem log (log 271) to identify the local LU and partner LU, and correct the mismatch in the cryptography keys.

Error Message

%SNASW-4-HS_LOG_1: EXCEPTION - [int] - LU6.2 session state error [chars]

Explanation An LU 6.2 session state error has occurred. This may indicate an interoperability problem. Sense codes are as follows:

- 20020000—Chaining sequence error.
- 20030000—Bracket state error.
- 20040000—Received normal flow request when half-duplex flip-flop state not receive.
- 200A0000—Immediate request mode violated by partner LU.
- 200B0000—Queued response indicator invalid.
- 200E0000—Unexpected SIGNAL response.
- 200F0000—Received unexpected response or received EXPD RU before previous EXPD RU has been acknowledged.
- 20120000—Unexpected sense code on negative response.
- 40040000—Received RQE, BB, CEB chain from contention loser.

- 40110000—RU category of response does not match request.
- 40120000—Request code of response does not match request.
- 40210000—QRI setting on response does not match request.

The session will be deactivated with the specified sense code.

Recommended Action Use the information in the session-deactivated problem log (271) to identify the local LU and partner LU. If conditions warrant, run a trace on the specified link station, contact your Cisco technical support representative with the log and trace information, and provide the representative with the gathered information.

Error Message

%SNASW-4-HS_LOG_3: EXCEPTION - [int] - MU format errors [chars]

Explanation An LU 6.2 session format error has occurred. This may indicate an interoperability problem. Sense codes are as follows:

- 080F6051—Security error (FMH12 error).
- 10030000—Function not supported (unrecognized request code).
- 10050000—SIGNAL or LUSTAT request too short.
- 10084001—Invalid FM header type (not 5, 7 or 12).
- 40030000—BB not allowed.
- 40040000—CEB or EB not allowed.
- 40070000—Definite response not allowed.
- 40090000—CD not allowed.
- 400B0000—Chaining error or EC,RQE1/2,CD RU received on full-duplex conversation.
- 400C0000—Bracket error.
- 400F0000—Incorrect use of format indicator (FI).
- 40100000—Alternate code not supported.
- 40110000—Incorrect specification of RU category.
- 40120000—Incorrect specification of request code.
- 40130000—Incorrect specification of SDI and RTI.
- 40140000—Incorrect use of DR1I, DR2I and ERI 40
- 150000—Incorrect use of QRI 401
- 60000—Incorrect use of EDI.
- 40170000—Incorrect use of PDI.
- 40180000—Incorrect setting of QRI with bidder's BB.
- 40190000—Incorrect indicators with last-in-chain request.

The session will be deactivated with the specified sense code.

Recommended Action Use the information in the session-deactivated problem log (271) to identify the local LU and partner LU. If conditions warrant, run a trace on the specified link station, contact your Cisco technical support representative with the log and trace information, and provide the representative with the gathered information.

Error Message

%SNASW-4-HS_LOG_4: EXCEPTION - [int] - LU6.2 response correlation error [chars]

Explanation An LU 6.2 response correlation error has occurred. This may indicate an interoperability problem. The session will be deactivated with the sense code 200E0000 (uncorrelated positive response, or uncorrelated RTR response).

Recommended Action Use the information from the session-deactivated problem log (271) to identify the local LU and partner LU. If conditions warrant, run a trace on the specified link station, contact your Cisco technical support representative with the log and trace information, and provide the representative with the gathered information.

Error Message

%SNASW-4-HS_LOG_5: EXCEPTION - [int] - LU6.2 session ended abnormally - insufficient storage [chars]

Explanation An LU 6.2 session has ended abnormally because of insufficient storage. The session will be deactivated with the specified sense code.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-HS_LOG_6: EXCEPTION - [int] - Protocol error during CRV exchange [chars]

Explanation A protocol error has occurred during a CRV exchange. This indicates a possible interoperability problem. Sense codes are as follows:

- 20090000—CRV request received from secondary LU, or CRV response received from primary LU, or CRV not received when expected.
- 10020000—CRV RU too short.
- 400F0000—CRV with FI not set.
- 400B0000—CRV chain indicators not set to BC, EC.
- 40140000—CRV not RQD1.
- 40110000—CRV not expedited.
- 40150000—CRV with QRI not set.
- 40080000—CRV with PI set.
- 400C0000—CRV request with BBI, EBI or CEBI set.
- 400D0000—CRV request with CDI set.
- 40100000—CRV request with CSI set to CODE1.

- 40160000—CRV request with EDI set.
- 40170000—CRV request with PDI set.
- 40130000—CRV response RTI and SDI inconsistent.

The session will be deactivated with the specified sense code.

Recommended Action Use the information in the session-deactivated problem log (271) to identify the local LU and partner LU. Run a trace on the specified link station, contact your Cisco technical support representative with the log and trace information, and provide the representative with the gathered information.

Error Message

```
%SNASW-4-HS_LOG_7: EXCEPTION - [int] - SIGNAL RU received on full-duplex
conversation [chars]
```

Explanation An incoming SIGNAL RU has been received on a full-duplex conversation. The session will be deactivated with the sense code 10030004.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SNASW-3-HS_LOG_8: PROBLEM - [int] - EXPD RU received while previous expedited
data remains to be processed [chars]
```

Explanation An EXPD RU has been received while previously expedited data remains to be processed. The session will be deactivated with the sense code 200F0000.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SNASW-4-HS_LOG_9: EXCEPTION - [int] - Insufficient storage to initialise half
session [chars]
```

Explanation Available storage was insufficient for initializing the half session. The half session will fail to activate with the specified sense code.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-LDLC_CTRL_LOG_0: EXCEPTION - [int] - Unable to create a new LDLC_CTRL instance [chars]

Explanation The system was unable to create a new LDLC_CTRL instance. Link activation cannot continue. This condition will result in the failure of an outbound link activation attempt or the rejection of an inbound link activation.

Recommended Action Check the surrounding logs for evidence of buffer congestion. If buffer congestion is causing this failure, either decrease the system load or make more resources available to LDLC.

Error Message

%SNASW-4-LDLC_CTRL_LOG_1: EXCEPTION - [int] - LDLC command frame retry limit exceeded [chars]

Explanation The LDLC command frame retry limit has been exceeded. Link activation will fail, or an active link will be brought down.

Recommended Action Check the connectivity to the remote address

Error Message

%SNASW-4-LDLC_CTRL_LOG_2: EXCEPTION - [int] - LDLC link reported inoperative by underlying media [chars]

Explanation An LDLC link has been reported as inoperative by the underlying media. Link activation will fail, or an active link will be brought down.

Recommended Action Check for faults at the supplied destination address. Check for faults and error conditions in the underlying drivers and media. Check for connectivity in the underlying media. Check for outages on the connection path. Ensure that all the wires are still plugged in.

Error Message

%SNASW-4-LDLC_DATA_LOG_0: EXCEPTION - [int] - Unrecognised NHDR routing instruction [chars]

Explanation The system has received an unrecognized NHDR routing instruction. The specified packet cannot be routed by LDLC and will be discarded. Data may be lost. This condition may indicate an interoperability problem.

Recommended Action Check the surrounding logs for other evidence of interoperability problems. If failures or problems occur, gather a trace of the protocol flows, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-LDLC_DATA_LOG_1: EXCEPTION - [int] - Unrecognised LDLC RU identifier [chars]

Explanation The system has received an unrecognized LDLC RU identifier. This packet cannot be processed by LDLC and will be discarded. Link activation and link deactivation may fail. Data may be lost. This condition may indicate an interoperability problem.

Recommended Action Check the surrounding logs for other evidence of interoperability problems. If failures or problems occur, gather a trace of the protocol flows, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-LDLC_DATA_LOG_2: EXCEPTION - [int] - Unable to grant credit [chars]

Explanation The LDLC is unable to grant further send credit.

Recommended Action Check the surrounding logs for evidence of buffer congestion. If buffer congestion is causing this failure, either decrease the system load or make more resources available to the LDLC.

Error Message

%SNASW-6-LDLC_DEBUG_LOG_0: INFO - [int] - Link activation race has occurred [chars]

Explanation A link activation race has occurred. Link activation will be completed, but the routes may be different in each direction. No other effect will be noticeable.

Recommended Action No action is required.

Error Message

%SNASW-4-LDLC_IP_LOG_0: EXCEPTION - [int] - IPDLC failed to allocate necessary storage [chars]

Explanation The IPDLC could not allocate the necessary storage. Some operations may fail. See other logs.

Recommended Action Either decrease the system load (for example, by reducing the number of active links), or make more storage available to the IPDLC.

Error Message

%SNASW-4-LDLC_IP_LOG_1: EXCEPTION - [int] - IPDLC failed to request a posting [chars]

Explanation The IPDLC failed to request a posting. Link activation may fail or data transmission may be delayed.

Recommended Action Either decrease the system load (for example, by reducing the number of active links), or make more storage available to the IPDLC.

Error Message

```
%SNASW-4-LDLC_IP_LOG_2: EXCEPTION - [int] - IPDLC failed to grow a link hash table [chars]
```

Explanation The IPDLC failed to grow a link hash table. Data transmission rates may be marginally degraded.

Recommended Action If there are few instances of this log, the IPDLC has recovered, and no action is required. If this log occurs repeatedly, then either decrease the system load (for example, by reducing the number of active links), or make more storage available to the SNAP-IPDLC.

Error Message

```
%SNASW-4-LDLC_IP_LOG_3: EXCEPTION - [int] - IPDLC failed to create a UDP stub [chars]
```

Explanation The IPDLC failed to create a UDP stub. Port activation will fail.

Recommended Action Either decrease the system load (for example, by reducing the number of active links), or make more storage available to the IPDLC.

Error Message

```
%SNASW-4-LDLC_IP_LOG_4: EXCEPTION - [int] - IPDLC's UDP stub has failed to initialise [chars]
```

Explanation IPDLC has created a UDP stub, but the UDP stub failed to initialize successfully. Port activation will fail.

Recommended Action Check the surrounding logs and other diagnostics for reports of a failure from a UDP stub process.

Error Message

```
%SNASW-6-LDLC_IP_LOG_9: INFO - [int] - Invalid IP address specified for a IPDLC link [chars]
```

Explanation An invalid IP address has been specified for an IPDLC link. The link will fail to start.

Recommended Action Correct the configuration. These settings are supplied in the address information passed to the SNA switch on the SNASw link.

Error Message

%SNASW-4-LDLC_IP_LOG_10: EXCEPTION - [int] - Unable to activate IPDLC port [chars]

Explanation The system was unable to activate an IPDLC port. This condition will result in the failure of a port activation attempt. No further IPDLC operation will be possible until a port is activated successfully.

Recommended Action Check the surrounding logs for evidence of buffer congestion. If buffer congestion is causing this failure, either decrease system load or make more resources available to the IPDLC. Ensure that the necessary facilities are available for the UDP interface to operate correctly. Check that valid DLC-specific configuration data was provided to IPDLC at define time.

Error Message

%SNASW-4-LDLC_IP_LOG_11: EXCEPTION - [int] - Unable to activate IPDLC link [chars]

Explanation The system is unable to activate an IPDLC link. Link activation cannot continue. This condition will result in the failure of an outbound link activation attempt or the rejection of an inbound link activation.

Recommended Action Check the surrounding logs for evidence of buffer congestion. If buffer congestion is causing this failure, either decrease the system load or make more resources available to the IPDLC. Ensure that the necessary facilities are available for the UDP interface to operate correctly. Check that valid DLC specific configuration data was provided to SNAP-IPDLC at define time.

Error Message

%SNASW-3-LDLC_IP_LOG_12: PROBLEM - [int] - The IPDLC UDP stub process has abended - SNAP IPDLC will abend [chars]

Explanation The UDP stub process has ended abnormally. IPDLC will end itself abnormally. All links using SNAP-IPDLC will fail. SNAP-IPDLC will fail.

Recommended Action Check for the UDP/IP problem that caused the UDP stub to end abnormally. If the reason cannot be determined, gather a full trace and contact your Cisco technical support representative.

Error Message

%SNASW-6-LM_LOG_0: INFO - [int] - An LU-SSCP session has been activated for LU type 0,1,2 or 3 [chars]

Explanation An LU-SSCP session has been activated.

Recommended Action No action is required.

Error Message

%SNASW-6-LM_LOG_1: INFO - [int] - A PLU-SLU session has been activated for LU type 0,1,2 or 3 [chars]

Explanation A PLU-SLU session has been activated.

Recommended Action No action is required.

Error Message

%SNASW-6-LM_LOG_2: INFO - [int] - An LU-SSCP session has been deactivated for LU type 0,1,2 or 3 [chars]

Explanation An LU-SSCP session has been deactivated.

Recommended Action No action is required.

Error Message

%SNASW-6-LM_LOG_3: INFO - [int] - A PLU-SLU session has been deactivated for LU type 0,1,2 or 3 [chars]

Explanation A PLU-SLU session has been deactivated.

Recommended Action No action is required.

Error Message

%SNASW-3-LM_LOG_4: PROBLEM - [int] - Insufficient storage to dynamically define dependent LU with host [chars]

Explanation Available storage was insufficient for dynamically defining a dependent LU with a host. The LU-SSCP session will not be activated.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-LM_LOG_5: PROBLEM - [int] - Insufficient storage to BIND LU type 0,1,2 or 3 PLU-SLU session (as PLU) [chars]

Explanation Available storage was insufficient for a BIND LU type 0, 1, 2, or 3 PLU-SLU session. The BIND request will not be sent.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-LM_LOG_6: EXCEPTION - [int] - Insufficient storage to send RTM statistics to host [chars]

Explanation Available storage was insufficient for sending the RTM statistics to the host. The RTM statistics displayed by the host will be inconsistent.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-LM_LOG_7: EXCEPTION - [int] - Insufficient storage to report RTM status to application [chars]

Explanation Available storage was insufficient for reporting the RTM status to the application. The RTM statistics reported and displayed by the application may be inconsistent.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-LM_LOG_12: PROBLEM - [int] - Insufficient storage to activate LU-SSCP session for LU type 0,1,2 or 3 (as SSCP) [chars]

Explanation Available storage was insufficient for activating an LU-SSCP session for LU type 0, 1, 2, or 3. The ACTLU request will not be sent.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-LM_LOG_13: PROBLEM - [int] - Insufficient storage to activate LU type 0,1,2 or 3 PLU-SLU session (as SLU) [chars]

Explanation Available storage was insufficient for activating an LU type 0, 1, 2, or 3 PLU-SLU session. The BIND request will be rejected with the specified sense code.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-LM_LOG_14: PROBLEM - [int] - Insufficient storage to activate LU-SSCP session for LU type 0,1,2 or 3 (as LU) [chars]

Explanation Available storage was insufficient for activating an LU-SSCP session for LU type 0, 1, 2, or 3. The ACTLU request will not be rejected with the specified sense code.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-LM_LOG_15: PROBLEM - [int] - A BIND request received by an LU type 0,1,2 or 3 was rejected by SNA Switch because it failed parameter checks [chars]

Explanation A BIND request was received by an LU type 0,1,2, or 3 that failed parameter checks. The sense codes that apply to this condition are as follows:

- 08210004—Cryptography required by SLU, not supported by PLU.
- 08210005—Session key missing.
- 0835xxxx—Parameter error at offset xxxx in BIND RU. The offsets that apply to this sense code are as follows:
 - 0002—Invalid FM profile.
 - 0003—Invalid TS profile.
 - 0004—Invalid primary FM usage.
 - 0005—Invalid secondary FM usage.
 - 0006—Invalid common FM usage.
 - 0007—Invalid common FM usage.
 - 0008—Invalid secondary send pacing.
 - 0009—Invalid secondary receive pacing.
 - 000A—Invalid secondary send RU size.
 - 000B—Invalid secondary receive RU size.
 - 000E—Invalid PS profile (invalid session type).
 - 000F—Invalid PS usage (applies to RJE BIND only).
 - 0010—Invalid primary half-session PS usage (applies to RJE BIND only).
 - 0014—Invalid default screen size: rows (applies to 3270 display BIND only) - invalid default buffer size: rows (applies to 3270 printer BIND only).
 - 0015—Invalid default screen size: columns (applies to 3270 display BIND only) - invalid default buffer size: columns (applies to 3270 printer BIND only).
 - 0016—Invalid alternate screen size: rows (applies to 3270 display BIND only) - invalid alternate buffer size: rows (applies to 3270 printer BIND only).
 - 0017—Invalid alternate screen size: columns (applies to 3270 display BIND only) - invalid alternate buffer size: columns (applies to 3270 printer BIND only).
 - 001A—Invalid cryptography.
 - 001B—Invalid cryptography method.

The BIND request will be rejected with the specified sense code. The PLU-SLU session is not activated.

Recommended Action If possible, investigate the configuration of the system that sent the BIND request. If a configuration error is found, correct it. If the configuration error cannot be found, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-LM_LOG_16: PROBLEM - [int] - A BIND request received by an LU type 0,1,2 or 3 was rejected by an application connected to SNA Switch [chars]

Explanation A BIND request that was received by an LU type 0, 1, 2, or 3 was rejected by an application connected to the SNA switch. The BIND request will be rejected with the specified sense code. The PLU-SLU session is not activated.

Recommended Action Investigate why the application rejected the BIND request; the sense code should help with this. It may be necessary to investigate the configuration of the system that sent the BIND request, if this is possible. If a configuration error is found, correct it. If the configuration error cannot be found, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-LM_LOG_17: PROBLEM - [int] - A BIND request received by an LU type 0,1,2 or 3 was rejected by SNA Switch because the application connection was not open [chars]

Explanation A BIND request that was received by an LU type 0, 1, 2, or 3 was rejected because the application connection was not open. This condition may be caused by a normal window condition, or it may indicate that the system that sent the BIND request is incorrectly configured or is defective. The BIND request will be rejected with the specified sense code. The PLU-SLU session is not activated.

Recommended Action Investigate the cause of the problem. If the information indicates that the system that sent the BIND request is incorrectly configured, correct the configuration error. If it appears that the system is defective, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-LM_LOG_18: EXCEPTION - [int] - An LU-SSCP session activation attempt failed because the SSCP was not suitable [chars]

Explanation An ACTLU was received for an LU from the wrong SSCP. The ACTLU is rejected with the sense code 084B0000. The LU activation attempt fails.

Recommended Action If it is required that the LU accept the ACTLU so that the activation attempt will succeed, change the LU definition so that either the LU requires the SSCP identifier that is received from the SSCP, or the LU accepts any SSCP identifier.

Error Message

%SNASW-3-LM_LOG_19: PROBLEM - [int] - An UNBIND RSP was received at a secondary LU [chars]

Explanation An UNBIND RSP was received at a secondary LU. This is an illegal condition SNA as no UNBIND RQ was sent. The UNBIND RSP is dropped.

Recommended Action The session may not be coming down properly. Check that the dependent LU applications are correctly replying to all signals. If the dependent LU applications are correctly replying to all signals, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-LM2_LOG_0: EXCEPTION - [int] - CRV exchange failed on a PLU-SLU session. The session will fail. [chars]

Explanation A CRV exchange has failed. This condition indicates that the cryptography keys configured at this LU and the partner LU are inconsistent. The session will be deactivated with the sense code 08350001.

Recommended Action Correct the mismatch in cryptography keys.

Error Message

%SNASW-4-LM2_LOG_1: EXCEPTION - [int] - A conventional half-session has aborted. [chars]

Explanation A critical buffer shortage, protocol error, or CRV exchange protocol error has occurred. This indicates a possible interoperability problem. Sense codes for CRV exchange errors are as follows:

- 20090000—CRV request received from secondary LU, or CRV response received from primary LU, or CRV not received when expected.
- 10020000—CRV RU too short.
- 400F0000—CRV with FI not set.
- 400B0000—CRV chain indicators not set to BC, EC.
- 40140000—CRV not RQD1.
- 40110000—CRV not expedited.
- 40150000—CRV with QRI not set.
- 40080000—CRV with PI set.
- 400C0000—CRV request with BBI, EBI or CEBI set.
- 400D0000—CRV request with CDI set.
- 40100000—CRV request with CSI set to CODE1.

- 40160000—CRV request with EDI set.
- 40170000—CRV request with PDI set.
- 40130000—CRV response RTI and SDI inconsistent.

The session will be deactivated with the specified sense code.

Recommended Action If the surrounding logs indicate a critical congestion, decrease the system load or make more resources available to the SNA switch. If the surrounding logs do not indicate a critical congestion, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SNASW-3-MIBQueryFailure: Query [chars] failed. NOF primary rc=[hex] secondary rc=[hex].
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SNASW-3-MIBRegisterFailure: [chars] Indication [hex] failed. NOF primary rc=[hex] secondary rc=[hex].
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SNASW-3-MIBTrapFailure: Trap failed. [chars] MIB OID=[chars] index OID=[chars].
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-MS_LOG_3: EXCEPTION - [int] - Insufficient storage to deliver MDS_MU to a registered application [chars]

Explanation Available storage was insufficient for delivering MDS_MU to a registered application. The MU will be returned to the sender indicating that a resource shortage error has occurred.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-MS_LOG_5: EXCEPTION - [int] - Memory shortage in processing signal [chars]

Explanation The system was unable to allocate memory to process an incoming TRANSFER_MS_DATA, SEND_MDS_MU, or register signal. The signal will be returned to the sender and note that a resource shortage error has occurred.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-MS_LOG_6: EXCEPTION - [int] - MS unable to add time stamp and/or product set id [chars]

Explanation The system was unable to add the product set ID or the date time stamp requested. This condition occurred because of memory shortage or because the addition caused an NMVT to exceed maximum size. Additions will not be made to the signal.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-6-MS_LOG_7: INFO - [int] - Alert data logged [chars]

Explanation TRANSFER_MS_DATA/SEND_MDS_MU data has arrived.

Recommended Action No action is required.

Error Message

%SNASW-4-MS_LOG_8: EXCEPTION - [int] - Memory shortage preventing data log [chars]

Explanation The system was unable to allocate memory and therefore was unable to log data supplied by the user. The data will not be logged.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-MS_LOG_9: EXCEPTION - [int] - Unrecognized signal received from application [chars]

Explanation A signal was received that was unrecognized and could not be returned to the sender. The signal memory will be freed.

Recommended Action Check that issued signals are acceptable according to the API specification.

Error Message

%SNASW-4-MS_LOG_10: EXCEPTION - [int] - Alert/Resolution received and cannot be sent [chars]

Explanation A memory failure occurred while the system was trying to allocate space to route a back-level alert or resolution to the parent MS process. The alert or resolution will not be sent. The information will be logged here.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-MS_LOG_12: EXCEPTION - [int] - Memory shortage in verb processing [chars]

Explanation The system was unable to allocate control block space to process an incoming verb. The verb will not be processed and will be returned to the sending application with a primary return code of NAP_UNEXPECTED_SYSTEM_ERROR.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-MS_LOG_13: EXCEPTION - [int] - Memory shortage in trying to send an alert [chars]

Explanation The system was unable to allocate memory needed to send an alert. The alert will not be sent; however, the sense code of the alert will be logged.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-MS_LOG_14: EXCEPTION - [int] - Memory shortage in MDS_MU processing [chars]

Explanation The system was unable to allocate the memory necessary to process an MDS_MU. The MDS_MU will not be processed. If the MDS_MU originated at the local node, the SEND_MDS_MU verb containing the MDS_MU will be returned to the sending application, noting the error. If the MDS_MU did not originate from the local node, an error message will be returned to the originating application.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-MS_LOG_15: EXCEPTION - [int] - Correlator clash detected in MDS_MU processing [chars]

Explanation A correlation error was detected while the system was processing an MDS_MU. The MDS_MU will not be processed. If the MDS_MU originated at the local node, the SEND_MDS_MU verb containing the MDS_MU will be returned to the sending application, noting the error. If the MDS_MU did not originate from the local node, an error message will be returned to the originating application. An error message may also be sent to other applications if they are affected by the correlation clash.

Recommended Action Correct the correlator value and reissue the SEND_MDS_MU.

Error Message

%SNASW-4-MS_LOG_16: EXCEPTION - [int] - Insufficient storage to pass Alert data to registered Alert handler [chars]

Explanation Available storage was insufficient for passing an alert to the registered Alert Handler. The alert will not be sent but will be logged.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-MS_LOG_17: EXCEPTION - [int] - Following alert failed to be sent to focal point [chars]

Explanation The system received a send failure for an alert that is stored on the send alert queue. No held alert function is available to store the alert until another focal point is established. The alert will not be sent; however, it will be logged.

Recommended Action No action is required.

Error Message

%SNASW-4-MS_LOG_18: EXCEPTION - [int] - Error on alert send not correlated with entries on send alert queue [chars]

Explanation The system was unable to correlate an error received on an alert send with the alerts stored in the send alert queue. Either the send alert queue is too small and the original alert has been deleted, or a previous error prevented the alert from being held on the queue. The alert will not be sent to the focal point.

Recommended Action Determine if a prior memory shortage caused the alert not to be held on the queue.

Error Message

%SNASW-3-MS_LOG_22: PROBLEM - [int] - Error message received reporting invalid format of our MDS_MUs [chars]

Explanation MS capabilities has received an error message that reports a format error has occurred on an MDS_MU that the local node has sent. The error message will be logged; however, no further action can be taken. Ignoring the message may lead to further unexpected occurrences.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-MS_LOG_23: EXCEPTION - [int] - MS Capabilities unable to send request due to memory shortage [chars]

Explanation MS capabilities failed to get space to send a message and the message will not be sent. If the intended message was a request for focal point services, MS will pursue focal point services alternatively. If the intended message was to revoke a previous focal point, the message will not be sent. The node will still appear in the focal point sphere of control list.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-MS_LOG_24: EXCEPTION - [int] - Error message received at MS Capabilities (delivery failure) [chars]

Explanation MS Capabilities has received an error message. This message is assumed to be the result of a send failure. The error message received will be logged so that send failure types can be examined. MS capabilities will take appropriate recovery action if the failed send affects the focal point table.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-MS_LOG_27: EXCEPTION - [int] - Memory Failure in MDS creation sequence [chars]

Explanation MDS failed to get needed memory during the creation sequence. The MDS creation will fail.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-MS_LOG_28: EXCEPTION - [int] - Insufficient storage to process received MS Capabilities information [chars]

Explanation Available storage was insufficient for processing the received MS Capabilities information. The category for which this failure occurred will be reset.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-MS_LOG_29: EXCEPTION - [int] - Parsing error found in MDS_MU header [chars]

Explanation The MDS has received an MDS_MU that it could not parse correctly. An alert will be raised. If the MDS_MU originated from a local application, the SEND_MDS_MU will be returned with the return codes NAP_PARAMETER_CHECK and NAP_INVALID_MDS_MU_FORMAT.

Recommended Action Investigate the syntax of the MDS_MU that was sent, correct the syntax, and reissue the SEND_MDS_MU.

Error Message

%SNASW-4-MS_LOG_31: EXCEPTION - [int] - Insufficient storage to queue Alert/Resolution for error correlation, [chars]

Explanation Available storage was insufficient for queuing an alert or resolution for error correlation. The alert or resolution will not be queued. If an error message regarding the failure to send this alert or resolution is received, MDS will be unable to correlate it. If the alert or resolution is sent successfully, no further problems will result.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-MS_LOG_32: EXCEPTION - [int] - MDS unable to get memory to send TP_ENDED [chars]

Explanation The MDS was unable to get a buffer to send TP_ENDED for SEND_TP. TP_ENDED will not be sent.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-MS_LOG_33: EXCEPTION - [int] - MDS unable to get memory for SNASVCMG session list entry [chars]

Explanation The MDS was unable to get memory for a SNASVCMG session control block. The control block will not be obtained.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-MS_LOG_34: EXCEPTION - [int] - Unexpected what_received in MDS Transaction Program [chars]

Explanation An MDS Transaction Program has received an unexpected what_received. The transaction program will reinitialize. The MDS_MU that was being sent will be returned to the originator if the error was detected at the originating node, or the originator will be notified of the send failure via an error message.

Recommended Action Investigate the cause of the unexpected what_received.

Error Message

%SNASW-4-MS_LOG_36: EXCEPTION - [int] - Following locally originated MSCAPS message failed to be sent [chars]

Explanation The system has received a send failure for a local MS capabilities originated message. MS capabilities will treat the send failure as a loss of connectivity to the partner node. If focal point relationships are affected, MS capabilities will take appropriate recovery action.

Recommended Action Investigate the cause of the failed send.

Error Message

%SNASW-4-MS_LOG_37: EXCEPTION - [int] - MS unable to allocate space for link control block [chars]

Explanation The system was unable to allocate a resource to set up a link control block for a received PU_STATUS message. The active link will be treated as unknown by MS. Any messages received over the link will be returned as undeliverable. Any TRANSFER_MS_DATA or SEND_MDS_MUs received from applications that specify the link in the PU_STATUS will be returned with link_name unknown.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-NOF_LOG_10: PROBLEM - [int] - Insufficient storage to process ACTLU [chars]

Explanation Available storage was insufficient for processing the received ACTLU. The LU-SSCP session will not be started. An ACTLU negative response with the specified sense code is sent.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-NOF_LOG_11: PROBLEM - [int] - ACTLU received for LU which is not defined locally, and implicit LU definition is not supported [chars]

Explanation An ACTLU was received for an LU that is not defined locally, and implicit LU definition is not supported. This condition typically indicates a mismatch between this node and the host configuration. The LU-SSCP session is not activated. The ACTLU is rejected with the specified sense code.

Recommended Action Remove the LU from the host configuration.

Error Message

%SNASW-4-NOF_LOG_15: EXCEPTION - [int] - An LU-SSCP session activation attempt failed because the SSCP was not suitable [chars]

Explanation An ACTLU was received for an LU from the wrong SSCP. The ACTLU is rejected with the sense code 084B0000. The LU activation attempt has failed.

Recommended Action If it is required that the LU accept the ACTLU so that the activation attempt will succeed, change the LU definition so that either the LU requires the SSCP identifier that is received from the SSCP, or the LU accepts any SSCP identifier.

Error Message

%SNASW-6-NOF_LOG_2: INFO - [int] - Node started [chars]

Explanation The node has been successfully started.

Recommended Action No action is required.

Error Message

%SNASW-3-NOF_LOG_3: PROBLEM - [int] - Insufficient storage to start SNA Switch [chars]

Explanation Available storage was insufficient for starting the SNA switch. The SNA switch was not started.

Recommended Action Make more storage available to the SNA switch.

Error Message

%SNASW-6-NOF_LOG_4: INFO - [int] - Node stopped [chars]

Explanation The node has been successfully stopped.

Recommended Action No action is required.

Error Message

%SNASW-3-NOF_LOG_7: PROBLEM - [int] - Failed to dynamically load TP [chars]

Explanation The system failed to dynamically load an APPC transaction program or CPI-C application. The received Attach will fail with the specified sense code.

Recommended Action Collect the trace information, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-PC_LOG_0: EXCEPTION - [int] - Unable to route intra-node session data [chars]

Explanation The system was unable to route intranode session data. This error usually indicates a race condition when an intranode session is deactivating.

Recommended Action No action is required.

Error Message

%SNASW-3-PS_LOG_1: PROBLEM - [int] - Attach rejected because requested conversation type not supported by requested transaction program [chars]

Explanation Attach rejected because the specified conversation type is not supported by the specified transaction program. This condition may be a result of be a mismatch in the capabilities of the originating transaction program and the destination transaction program, or it may simply be a configuration error. The Attach will be rejected.

Recommended Action Check the conversation type or types supported by the specified transaction program, and check that this matches the conversation type supported defined for the transaction program. If they match, or the transaction program is not defined, there is a mismatch between the originating and destination transaction programs.

Error Message

%SNASW-4-PC_LOG_4: EXCEPTION - [int] - Insufficient storage to generate Alert [chars]

Explanation Available storage was insufficient for generating an alert to report invalid received data. An alert will not be generated.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-PC_LOG_5: EXCEPTION - [int] - Unable to route inter-node session data [chars]

Explanation The system was unable to route internode session data. This error usually indicates a race condition when an internode session is deactivating.

Recommended Action No action is required.

Error Message

%SNASW-4-PC_LOG_9: EXCEPTION - [int] - Unable to forward an HPR NLP - unknown ANR label [chars]

Explanation The system failed to forward an HPR network layer packet because the ANR label could not be matched to an outgoing link. This is usually a normal race condition that occurs when an HPR-capable link is deactivated. This condition may also be caused by an earlier resource shortage (look for log 192). An RTP connection may attempt to switch paths or may fail altogether.

Recommended Action Enter the **show snasw link** command to look for an active HPR-capable link that has the specified ANR label. If there is an active HPR-capable link that has the specified ANR label, the problem has been caused by a shortage of storage. Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-PC_LOG_10: PROBLEM - [int] - Insufficient storage to start link inactivity timer [chars]

Explanation Available storage was insufficient for starting the link-inactivity timer. The limited resource link will not be automatically deactivated.

Recommended Action If the link is idle (not being used by any sessions), deactivate the link by entering the **snasw stop link** command.

Error Message

%SNASW-3-PC_LOG_11: PROBLEM - [int] - Unable to forward an HPR NLP - insufficient storage [chars]

Explanation Available storage was insufficient for forwarding an HPR network layer packet. The network layer packet will be discarded. If this error occurs frequently, it may cause RTP connections to switch paths or fail altogether.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-PC_LOG_12: PROBLEM - [int] - Insufficient storage to register ANR label [chars]

Explanation Available storage was insufficient for registering an ANR label. HPR traffic that is using this ANR label will not be routed correctly, and as a result RTP connections may switch paths or fail altogether.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-PC_LOG_14: EXCEPTION - [int] - Received a frame with a badly formed transmission header or a frame that is too small to be a valid SNA frame [chars]

Explanation The system has received a frame that has a badly formed transmission header or a frame that is too small to be a valid SNA frame. The invalid frame will be discarded. An alert is generated.

Recommended Action No action is required.

Error Message

%SNASW-4-PC_LOG_15: EXCEPTION - [int] - Unable to correlate DLC credit for MLTG link [chars]

Explanation The system was unable to correlate DLC credit for an MLTG link. This exception will occur during a window condition in normal link deactivation.

Recommended Action If several instances of this log appear and poor RTP connection performance occurs, investigate this condition further by querying link stations that are members of the MLTGs. Unexpectedly low quantities of data sent over a link may indicate problems with DLC credit. Run a trace of the signals sent to and from the DLCs that are underlying the affected links, contact your Cisco technical support representative, and provide the representative with the details of the problem.

Error Message

%SNASW-4-PC_LOG_16: EXCEPTION - [int] - Link failure because too many outgoing packets are queued for transmission [chars]

Explanation A remote node is not processing information fast enough, and this situation is causing large queues to form on this node. This condition results in a link failure.

Recommended Action Check the error logs on the remote node to which this link is connected.

Error Message

%SNASW-4-PC_LOG_17: EXCEPTION - [int] - Link failure because too many outgoing packets are queued for transmission [chars]

Explanation A remote node is not processing information fast enough, and this situation is causing large queues to form on this node. This condition results in a link failure.

Recommended Action Check the error logs on the remote nodes to which this MLTG is connected.

Error Message

%SNASW-3-PS_LOG_3: PROBLEM - [int] - Conversation ended by protocol error [chars]

Explanation A session that is being used by a conversation has been deactivated because of a protocol error. This error caused the conversation to fail. The conversation will be terminated, either by an APPC primary_rc of NAP_CONV_FAILURE_NO_RETRY or by a CPI-C return_code of CM_RESOURCE_FAILURE_NO_RETRY.

Recommended Action This log provides information about the TPs and conversation that have been affected by a protocol error on a session. Other more specific problem or exception logs give more information on the protocol error. Use the session identifier to correlate this log with other related logs.

Error Message

%SNASW-3-PS_LOG_4: PROBLEM - [int] - Conversation ended by session outage [chars]

Explanation The session that is being used by a conversation has been deactivated because of a session outage. This outage caused the conversation to fail. The conversation will be terminated, either by an APPC primary_rc of NAP_CONV_FAILURE_RETRY, or a CPI-C return_code of CM_RESOURCE_FAILURE_RETRY.

Recommended Action This log gives information about the TPs and conversation that have been affected by a session outage. Other, more specific problem or exception logs give more information on the reason for the session outage. Use the session identifier to correlate this log with other related logs.

Error Message

%SNASW-4-PS_LOG_5: EXCEPTION - [int] - Protocol error detected on conversation [chars]

Explanation The SNA switch has detected a protocol error on an APPC conversation. The sense codes are as follows:

- 10010000—Invalid GDS logical length.
- 1008201D—FMH7 or log data mismatch (for example, FMH7 not received when expected, or log data truncated, or CEB not set on FMH7 when expected).
- 10086000—Received FMH but not FMH7.
- 1008200E—FMH7 format error (log data concatenation not valid).
- 008200A—FMH7 received with no sense data (sense data is zero).
- 20040000—An incoming RU has been received on a full-duplex conversation that is in send-only state.

The conversation will be terminated, either by an APPC primary_rc of NAP_CONV_FAILURE_NO_RETRY, or a CPI-C return_code of CM_RESOURCE_FAILURE_NO_RETRY, and the session will be deactivated.

Recommended Action Report the protocol error to the partner LU support. If additional diagnostic information is required, run a link trace. The session identifier can be used to correlate this log to other logs that contain the appropriate link station name.

Error Message

%SNASW-4-PS_LOG_7: EXCEPTION - [int] - Error data received from partner LU. [chars]

Explanation The partner TP has issued a SEND_ERROR or DEALLOCATE verb specifying an error in the data. An error state was generated by the partner TP. The specified TP will experience a problem. Subsequent recovery or termination of the conversation will be determined by the applications.

Recommended Action Check that both the local TP and the partner TP exist, are correctly named, and are working properly.

Error Message

%SNASW-4-PS_LOG_8: EXCEPTION - [int] - Error data sent to partner LU. [chars]

Explanation The local TP has issued a SEND_ERROR or DEALLOCATE verb specifying error data. The specified TP will experience a problem. Subsequent recovery or termination of the conversation will be determined by the applications.

Recommended Action Check that both the local TP and the partner TP exist, are correctly named, and are working properly.

Error Message

%SNASW-6-PS_LOG_9: INFO - [int] - Processed APING from partner LU. [chars]

Explanation An APING from the partner LU has been processed successfully.

Recommended Action No action is required.

Error Message

%SNASW-3-PS_LOG_10. : PROBLEM - [int] - Attach rejected because requested conversation duplex type not supported by requested transaction program [chars]

Explanation The Attach was rejected because the specified conversation duplex type is not supported by the specified transaction program. This condition may indicate a mismatch in the capabilities of the originating transaction program and the destination transaction program. This condition may also be a configuration error. Possible sense codes are as follows:

- 10086034—Half-duplex Attach, not supported by TP.
- 08640003—Full-duplex Attach, not supported by TP

The Attach will be rejected.

Recommended Action Check that the conversation duplex type or types are supported by the specified transaction program. Check that the conversation duplex type or types match the conversation type that is supported and defined for the transaction program. If the types match, or the transaction program is not defined, there is a mismatch between the originating and destination transaction programs.

Error Message

%SNASW-4-PS_LOG_11: EXCEPTION - [int] - Entry could not be added to signed-on-to list sending PV sign-on Attach. [chars]

Explanation The local LU has failed to add an entry into the signed-on-to list when sending a PV sign-on Attach (FMH-5). This condition occurred because of a resource shortage. The Attach will be sent but will not contain the sign-on request.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-PS_LOG_12: EXCEPTION - [int] - Unable to process Sign-Off verb due to resource shortage. [chars]

Explanation The local LU was unable to process a sign-off verb issued by a local TP because of a resource shortage. The sign-off request will fail, and any entries in the signed-on-to and sign-on-from lists will remain valid.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-PS_LOG_13: EXCEPTION - [int] - SNA Switch detected a mapped conversation protocol error on an APPC mapped conversation [chars]

Explanation The SNA switch has detected a mapped conversation protocol error on an APPC mapped conversation. The conversation will be terminated, either by an APPC primary_rc of NAP_CONV_FAILURE_NO_RETRY or by a CPI-C return_code of CM_RESOURCE_FAILURE_NO_RETRY. The partner TP will fail the conversation with an APPC primary_rc of NAP_DEALLOCATE_ABEND or a CPI-C return_code of CM_DEALLOCATE_ABEND. The session will not be deactivated.

Recommended Action Report the protocol error to the partner LU support. If additional diagnostic information is required, run a link trace. The session identifier can be used to correlate this log to other logs that contain the appropriate link station name.

Error Message

%SNASW-4-PS_LOG_14: EXCEPTION - [int] - SNA Switch detected a mapped conversation protocol error on an APPC mapped conversation [chars]

Explanation The SNA switch has received an error data GDS variable on an APPC mapped conversation. The conversation will be terminated, either by an APPC primary_rc of NAP_CONV_FAILURE_NO_RETRY or by a CPI-C return_code of CM_RESOURCE_FAILURE_NO_RETRY. The partner TP will fail the conversation with an APPC primary_rc of NAP_DEALLOCATE_ABEND or a CPI-C return_code of CM_DEALLOCATE_ABEND. The session will not be deactivated.

Recommended Action Report the protocol error to the partner LU support. If additional diagnostic information is required, run a link trace. The session identifier can be used to correlate this log to other logs which contain the appropriate link station name.

Error Message

%SNASW-4-PS_LOG_15: EXCEPTION - [int] - An LU received an aping with data size greater than the maximum allowed [chars]

Explanation An LU received an APING that has a data length greater than the maximum allowed length. The conversation will be terminated with a primary_rc of DEALLOC_ABEND.

Recommended Action Do not APING the SNA switch LUs with a data size greater than the defined maximum. Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-6-PU_LOG_0: INFO - [int] - A PU-SSCP session has been activated [chars]

Explanation A PU-SSCP session has been activated.

Recommended Action No action is required.

Error Message

%SNASW-6-PU_LOG_1: INFO - [int] - A PU-SSCP session has been deactivated [chars]

Explanation A PU-SSCP session has been deactivated.

Recommended Action No action is required.

Error Message

%SNASW-4-PU_LOG_2: EXCEPTION - [int] - Insufficient storage to send RTM statistics to host [chars]

Explanation Available storage was insufficient for sending RTM statistics to the host. The RTM statistics that are displayed by host will be inconsistent.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-RM_LOG_0: PROBLEM - [int] - Insufficient storage to start TP instance and conversation requested by received Attach [chars]

Explanation Available storage was insufficient for starting the transaction program instance and conversation requested by a received attach (FMH5). If other instances of the same transaction program are active, the SNA switch will queue the attach and wait for one of them to become free. Otherwise, the session will be deactivated with a sense code of 08640000).

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-RM_LOG_3: PROBLEM - [int] - Insufficient storage to start conversation requested by [MC_]ALLOCATE or CMALLC [chars]

Explanation Available storage was insufficient for starting a new conversation requested by ALLOCATE, MC_ALLOCATE or CMALLC. [MC_]ALLOCATE will fail with a primary_rc of NAP_UNEXPECTED_SYSTEM_ERROR, or CMALLC will fail with a return_code of CM_PRODUCT_SPECIFIC_ERROR.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-RM_LOG_13: EXCEPTION - [int] - APPC Transaction Program or CPI-C application has ended abnormally with active conversations [chars]

Explanation An APPC transaction program or CPI-C application has ended abnormally with active conversations. This condition usually indicates an error in the application. The SNA switch will deactivate all sessions currently being used by the application.

Recommended Action Run a trace on the APPC API or the CPI-C API to see the sequence of verbs that is causing the problem.

Error Message

%SNASW-3-RM_LOG_14: PROBLEM - [int] - Deactivating session because of insufficient storage [chars]

Explanation The SNA switch has deactivated the session because of insufficient storage.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-RM_LOG_15: PROBLEM - [int] - Insufficient storage to initiate session activation requested by [MC_]ALLOCATE or CMALLC [chars]

Explanation Available storage was insufficient for initiating the session activation requested by ALLOCATE, MC_ALLOCATE or CMALLC. [MC_]ALLOCATE will fail with a primary_rc of NAP_ALLOCATION_ERROR and a secondary_rc of NAP_ALLOCATION_FAILURE_NO_RETRY. CMALLC will fail with a return_code of CM_ALLOCATION_FAILURE_NO_RETRY.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-RM_LOG_22: PROBLEM - [int] - LU-LU verification failed. [chars]

Explanation LU-LU verification has failed. The partner LU has sent an incorrect response to a challenge that was sent by a local LU. This condition has been caused by either a security attack or a defect in the software at the partner LU location. The session will be deactivated.

Recommended Action Check the identity of the partner LU. If the condition was caused by a defect in the software at the partner LU location, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-RM_LOG_23: EXCEPTION - [int] - Insufficient storage to deactivate limited resource session [chars]

Explanation Available storage was insufficient for deactivating a limited resource session. The limited resource session will not be deactivated (although it may be deactivated later). This condition could cause limited resource links to be kept active while they are not required.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-6-RM_LOG_27: INFO - [int] - Session limits changed [chars]

Explanation The session limits for a local LU, partner LU, have changed. The mode has also changed. The termination count indicates the number of sessions that the SNA switch will deactivate as a result of the change in session limits.

Recommended Action No action is required.

Error Message

%SNASW-3-RM_LOG_37: PROBLEM - [int] - LU-LU verification protocol error [chars]

Explanation An LU-LU verification protocol error has occurred. This condition may indicate an interoperability problem. The session will be deactivated with the specified sense code.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-RM_LOG_42: PROBLEM - [int] - Failed to activate a new session, since this would exceed LU or mode session limit [chars]

Explanation The SNA switch was unable to activate a new session because the maximum session limit specified for the mode or the local LU would be exceeded. ALLOCATE, MC_ALLOCATE, or CMALLC verbs will either fail or hang waiting for a session to become free.

Recommended Action Wait for a session to become free and retry, or use a different mode.

Error Message

%SNASW-3-RM_LOG_43: PROBLEM - [int] - Insufficient storage to start TP instance requested by TP_STARTED [chars]

Explanation Available storage was insufficient for starting the transaction program instance requested by TP_STARTED. If other instances of the same transaction program are active, the SNA switch will queue the TP_STARTED waiting for one of them to become free. Otherwise, the TP_STARTED verb will fail with primary_rc of NAP_UNEXPECTED_SYSTEM_ERROR.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-RM_LOG_44: PROBLEM - [int] - Insufficient storage to initiate automatic session activation [chars]

Explanation Available storage was insufficient for initiating an automatic session activation. Fewer active sessions will be available on the specified mode, and application delays or failures may result.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-RM_LOG_45: PROBLEM - [int] - Insufficient storage to initiate session activation requested by ACTIVATE_SESSION [chars]

Explanation Available storage was insufficient for initiating session activation requested by ACTIVATE_SESSION verb. ACTIVATE_SESSION will fail with NAP_ACTIVATION_FAIL_NO_RETRY

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

```
%SNASW-3-RM_LOG_46. : PROBLEM - [int] - Bracket protocol error [chars]
```

Explanation A bracket protocol error has occurred. This condition may indicate a problem in the partner LU. The sense codes are as follows:

- 20080000—Partner LU attempted to start bracket after sending BIS.
- 20030000—Partner LU attempted to start bracket after local LU had BID for session successfully, or unexpected RTR request received.
- 20100000—Received negative response to BID with the sense code 088B0000 from a partner LU that supports parallel sessions, or BIS protocol error.

The session will be deactivated with the specified sense code.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SNASW-3-RM_LOG_47: PROBLEM - [int] - Attach protocol error [chars]
```

Explanation Attach protocol error. This may indicate a problem in the partner LU. The sense codes are as follows:

- 080F6051—Attach security protocol violation.
- 10086011—LUW identifier format error, or LUW identifier not specified when sync level is syncpt.
- 10086040—Sync level not supported by session, or already-verified not accepted from partner LU.
- 10086031—PIP not allowed by TP.

The session will be deactivated with the specified sense code.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SNASW-3-RM_LOG_48: PROBLEM - [int] - Attach rejected because security information invalid [chars]
```

Explanation An Attach has been rejected because the security information is invalid. This condition indicates an attempt to access a secure TP by an unknown user or by a known user who has specified an incorrect password. The Attach will be rejected.

Recommended Action Use the information in the log to locate the attempted security violation.

Error Message

%SNASW-3-RM_LOG_49: PROBLEM - [int] - Attach rejected because requested sync level not supported by requested transaction program [chars]

Explanation An Attach has been rejected because the specified synchronization level is not supported by the specified transaction program. This condition may indicate a mismatch in the capabilities of the originating transaction program and the destination transaction program. This condition might also indicate a configuration error. The Attach will be rejected.

Recommended Action Check the synchronization level supported by the specified transaction program, and check that it matches the synchronization level defined for the transaction program. If the synchronization levels match, or the transaction program is not defined, there is a mismatch between the originating and destination transaction programs.

Error Message

%SNASW-3-RM_LOG_50: PROBLEM - [int] - Attach rejected because requested TP is temporarily disabled [chars]

Explanation An Attach has been rejected because the specified TP is temporarily disabled. The Attach will be rejected.

Recommended Action This condition is not currently supported by the SNA switch. This log message should not occur.

Error Message

%SNASW-3-RM_LOG_51: PROBLEM - [int] - Attach rejected because requested TP is permanently disabled [chars]

Explanation An Attach has been rejected because the specified TP is permanently disabled. This condition should occur only if an application has explicitly disabled the transaction program. The Attach will be rejected.

Recommended Action Collect a trace. Copy the message and trace information exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-RM_LOG_52: PROBLEM - [int] - Failed to activate a new session, because mode name was not recognized [chars]

Explanation The SNA switch was unable to activate a new session because the mode name specified was not recognized. ALLOCATE, MC_ALLOCATE, or CMALLC verbs will fail.

Recommended Action Check the mode name.

Error Message

%SNASW-3-RM_LOG_53: PROBLEM - [int] - Attach rejected because security information not specified [chars]

Explanation An Attach has been rejected because security information is not specified. This condition indicates an attempt to access a secure TP without specifying a user ID or password. The Attach will be rejected.

Recommended Action Use the information in the log to locate the security mismatch.

Error Message

%SNASW-3-RM_LOG_54: PROBLEM - [int] - Bracket protocol error [chars]

Explanation A BIS protocol error has occurred. This condition may indicate a problem in the partner LU. The session will be deactivated with the sense code 20100000.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-RM2_LOG_0: PROBLEM - [int] - CP-CP session deactivated because of excessive delay [chars]

Explanation An adjacent node has not responded within a reasonable period of time to a request on a CP-CP session. The SNA switch will deactivate CP-CP sessions with this adjacent node. CP-CP sessions are deactivated with the sense code 08640002.

Recommended Action Contact the supplier of the adjacent node.

Error Message

%SNASW-6-RTP_LOG_0: INFO - [int] - RTP Connection has connected [chars]

Explanation The RTP connection has connected.

Recommended Action No action is required.

Error Message

%SNASW-6-RTP_LOG_1: INFO - [int] - RTP Connection has disconnected [chars]

Explanation The RTP connection has disconnected normally.

Recommended Action No action is required.

Error Message

%SNASW-4-RTP_LOG_2: EXCEPTION - [int] - RTP Connection has disconnected [chars]

Explanation The RTP connection has disconnected because of an error. Sessions that were using the connection will fail.

Recommended Action Investigate the cause of the error.

Error Message

%SNASW-4-RTP_LOG_3: EXCEPTION - [int] - Remote end of RTP Connection has disconnected [chars]

Explanation The RTP connection has disconnected due to an error. Sessions using the connection will fail.

Recommended Action Investigate the cause of the error.

Error Message

%SNASW-4-RTP_LOG_4: EXCEPTION - [int] - RTP connection has timed-out [chars]

Explanation The RTP connection has timed out. The node will attempt to switch paths.

Recommended Action Investigate the cause of the error.

Error Message

%SNASW-4-RTP_LOG_5: EXCEPTION - [int] - RTP connection dropped due to local link failure [chars]

Explanation An RTP connection has been dropped because of a local link failure. This condition might have been caused by operator intervention. The node will attempt to switch paths.

Recommended Action Investigate the cause of the link failure.

Error Message

%SNASW-6-RTP_LOG_6: INFO - [int] - Successful path-switch [chars]

Explanation The RTP connection has successfully switched paths.

Recommended Action No action is required.

Error Message

%SNASW-4-RTP_LOG_7: EXCEPTION - [int] - Path-switch failure [chars]

Explanation The RTP connection has failed to switch paths. The RTP connection will be disconnected.

Recommended Action Investigate the cause of the error.

Error Message

%SNASW-4-RTP_LOG_8: EXCEPTION - [int] - Segmented NLP received on Route Setup RTP connection [chars]

Explanation A Route Setup RTP connection RTP process received a segmented NLP. All NLPs that are received should contain Route Setup GDS data, which should never be segmented. The NLP will be dropped.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-RTP_LOG_9: EXCEPTION - [int] - RTP connection has timed-out [chars]

Explanation A route setup RTP connection has timed out waiting for the status from the adjacent node. The RTP connection will fail.

Recommended Action Investigate the cause of the error at the adjacent node.

Error Message

%SNASW-4-RTP2_LOG_0: EXCEPTION - [int] - RTP Connection is path-switching to a much longer path [chars]

Explanation An RTP connection is switching to a much longer path than it started with. Each packet requires much more room for routing information than was originally planned. Performance across this RTP connection may degrade, since some packets may have to be segmented.

Recommended Action If performance degradation is noticed, reactivate failed links, and then issue the PATH_SWITCH verb.

Error Message

%SNASW-4-RTP2_LOG_1: EXCEPTION - [int] - Invalid ARB support received from remote node [chars]

Explanation A value for ARB support that the local node does not support has been received in an ARB setup segment. The remote node has not completed the ARB negotiation correctly. This is a protocol error. The connection will be deactivated.

Recommended Action Investigate the cause of the error at the adjacent node.

Error Message

%SNASW-4-SC_LOG_1. : EXCEPTION - [int] - Protocol error detected in PIU on intermediate session [chars]

Explanation The SNA switch has detected a protocol error in a PIU received on an intermediate session. This typically indicates a problem on an adjacent node. The sense codes are as follows:

- 10010003—Invalid IPM format.
- 10020000—RU length error.
- 10030000—CLEAR request on secondary stage, or CLEAR response on primary stage.
- 20110000—Sender has overrun pacing window, or PI not set on first RU of window.
- 20110001—Unexpected IPM.
- 20110002—PI set on other than first RU in window.
- 20110003—Invalid pacing response.
- 80070000—Segment error.

The intermediate session will be deactivated.

Recommended Action If more diagnostics are required, run a trace on the specified link. Report the problem in the adjacent node to your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-SC_LOG_2: EXCEPTION - [int] - Deactivating intermediate session because of insufficient storage [chars]

Explanation The system has deactivated an intermediate session because of insufficient storage.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-SCM_LOG_0: PROBLEM - [int] - ISR session activation failed - ISR session limit reached [chars]

Explanation Intermediate session activation has failed because the SNA switch is not configured to support any more intermediate sessions. This condition is usually caused by a normal network race condition because the SNA switch will inform other network nodes that it has reached its limit on intermediate sessions via topology. ISR session activation will fail with the sense code 0805000D.

Recommended Action Collect a trace. Copy the message and trace information exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-SCM_LOG_1: PROBLEM - [int] - Protocol error in received ISR BIND request [chars]

Explanation A protocol error has occurred in a received ISR BIND request. This condition may indicate an interoperability problem. Sense codes are as follows:

- 08350008—The secondary-to-primary staging indicator is incorrect.
- 0835000C—The primary-to-secondary staging indicator is incorrect.
- 10010024—Unextended non-LU 6.2 BIND.
- 10020000—BIND RU length error ISR.

The session activation will fail with the specified sense code.

Recommended Action If more diagnostics are required, run a trace on the specified link. Report the problem to your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-SCM_LOG_3: PROBLEM - [int] - Unable to identify or activate the next hop of an ISR session [chars]

Explanation The system is unable to identify or activate the next hop of an ISR session. ISR session activation will fail with the specified sense code.

Recommended Action This log is preceded by other logs giving more specific reasons for the failure. Follow the actions given in those logs.

Error Message

%SNASW-3-SCM_LOG_4: PROBLEM - [int] - Fatal error detected in ISR session [chars]

Explanation ISR has detected a fatal error in an intermediate session. The ISR session will be deactivated with the specified sense code.

Recommended Action This log should be preceded by a log 536 or 537. Follow the actions given in those logs.

Error Message

%SNASW-3-SCM_LOG_5: PROBLEM - [int] - ISR session failure because of link outage or error [chars]

Explanation The ISR session has failed because of a link outage or link error. The ISR session will be deactivated with the specified sense code.

Recommended Action The information in this log can be used to give information to determine which ISR sessions are affected by a link outage or link error. The preceding logs will provide more specific information about the reason for the link outage or link error.

Error Message

%SNASW-3-SCM_LOG_6: PROBLEM - [int] - Unable to assign LFSID to secondary stage of ISR session [chars]

Explanation The system is unable to assign an LFSID to the secondary stage of an ISR session. This condition is probably caused by insufficient storage to extend the appropriate LFSID routing table. This condition could also indicate that the table is full. Each link can route a maximum of 64770 ISR sessions. ISR session activation will fail with the specified sense code.

Recommended Action This information in this log can be used to determine which ISR session is affected by a failure in the LFSID table management. Preceding logs give more detail on the reason for the failure.

Error Message

%SNASW-4-SCM_LOG_7: EXCEPTION - [int] - Unable to correlate BIND response received during ISR session activation [chars]

Explanation The system is unable to correlate a BIND response received during ISR session activation. This is a normal race condition caused by a BIND request that is immediately followed by an UNBIND request for the same session.

Recommended Action No action is required.

Error Message

%SNASW-4-SCM_LOG_8: EXCEPTION - [int] - Unable to correlate UNBIND request received for an ISR session [chars]

Explanation The system has failed to correlate an UNBIND request received for an ISR session. This is a normal race condition that is typically caused by the crossing of UNBIND requests for the same session.

Recommended Action An +RSP(UNBIND) is sent in reply. No action is required.

Error Message

%SNASW-6-SCM_LOG_9: INFO - [int] - ISR Session Activated [chars]

Explanation An ISR session has been activated.

Recommended Action No action is required.

Error Message

%SNASW-6-SCM_LOG_10: INFO - [int] - ISR Session Deactivated [chars]

Explanation An ISR session has been deactivated.

Recommended Action No action is required.

Error Message

%SNASW-3-SCM_LOG_11: PROBLEM - [int] - Received ISR BIND request with duplicate FQPCID [chars]

Explanation The system has received an ISR BIND request with a duplicate FQPCID. ISR session activation will fail with the sense code 083B0002.

Recommended Action If more diagnostics are required, run a trace on the specified link. Report the problem to your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-SCM_LOG_12: PROBLEM - [int] - Protocol error in received ISR BIND request [chars]

Explanation The system has detected a protocol error in a received ISR BIND response. This may indicate an interoperability problem. Sense codes are as follows:

- 08350007—The control-vectors-included indicator is incorrect.
- 08350008—The secondary-to-primary staging indicator is incorrect
- 0835000C—The primary-to-secondary staging indicator is incorrect.
- 086F0000—The BIND response length is inconsistent.
- 10010024—Unextended non-LU 6.2 BIND response.
- 10020000—BIND RU length error.

ISR session activation will fail with the specified sense code.

Recommended Action If more diagnostics are required, run a trace on the specified link. Report the problem to your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-SCM_LOG_13: PROBLEM - [int] - ISR is unable to support requested RU size [chars]

Explanation ISR is unable to support RU size requested on nonnegotiable BIND request or response. Sense codes are as follows:

- 0835000A—The maximum secondary send RU size is larger than that supported by ISR.
- 0835000B—The maximum primary send RU size is larger than that supported by ISR.

ISR session activation will fail with the specified sense code.

Recommended Action Collect a trace. Copy the message and trace information exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-SCM_LOG_14: PROBLEM - [int] - ISR is unable to support requested pacing window size [chars]

Explanation ISR is unable to support a fixed receive pacing window that was requested on nonnegotiable BIND request or response. Sense codes are as follows:

- 08350009—The maximum primary send window size is larger than that supported by ISR.
- 0835000D—The maximum secondary send window size is larger than that supported by ISR.

ISR session activation will fail with the specified sense code.

Recommended Action Collect a trace. Copy the message and trace information exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-SCM_LOG_15: PROBLEM - [int] - Insufficient storage to activate ISR session [chars]

Explanation Available storage was insufficient for activating the ISR session. The ISR session activation will fail with the sense code 08120014.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-SM_LOG_0: PROBLEM - [int] - Insufficient storage to define LU type 6.2 [chars]

Explanation Available storage was insufficient for defining a new LU type 6.2.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-SM_LOG_1: PROBLEM - [int] - Fatal error detected on LU6.2 session [chars]

Explanation The system has detected a fatal error on a LU 6.2 session. The session will be deactivated with the specified sense code.

Recommended Action This log gives additional information on the failed session. It is preceded by an exception log (150, 151, 153, 154, 155, 156, or 157) giving more specific information about the fatal error.

Error Message

%SNASW-3-SM_LOG_2: PROBLEM - [int] - BIND or +RSP(BIND) specifies duplex support which is different from that for existing sessions [chars]

Explanation An incoming BIND or +RSP(BIND) has specified a duplex support for the remote LU that is inconsistent with the duplex support for existing sessions between the partner LUs. The BIND or +RSP(BIND) is rejected.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-SM_LOG_5: PROBLEM - [int] - Insufficient storage to activate LU6.2 session [chars]

Explanation Available storage was insufficient for activating an LU 6.2 session. The session activation will fail with the specified sense code.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-SM_LOG_6: EXCEPTION - [int] - Abnormal UNBIND request received [chars]

Explanation The system has received an abnormal UNBIND request. This condition may indicate a configuration error or a protocol error. The session will fail with the specified sense code.

Recommended Action If the sense code indicates a configuration error, check for inconsistencies between the configuration at the local LU and the configuration at the partner LU. If the configuration is consistent and the problem persists, contact your Cisco technical support representative, and provide the representative with the details of the problem.

Error Message

%SNASW-3-SM_LOG_10: PROBLEM - [int] - Format error in received LU6.2 BIND request [chars]

Explanation The system has detected a format error for a received LU 6.2 BIND request. Sense codes are as follows:

- 0835xxxx—Parameter error at offset xxxx in BIND RU 0.
- 88C6000—FQPCID not included in extended BIND.
- 083B0000—Invalid FQPCID format.

The session activation will fail with the specified sense code.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-SM_LOG_11: PROBLEM - [int] - Format error in received LU6.2 BIND response [chars]

Explanation The system has detected a format error for a received LU 6.2 BIND response. The session activation will fail with the sense code 0835xxxx (parameter error at offset xxxx in BIND RU).

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-SM_LOG_12: PROBLEM - [int] - LU-mode session limit exceeded [chars]

Explanation An LU-mode session limit has been exceeded. This problem should not occur, because session limits are negotiated with a CNOS exchange prior to sessions being activated. However, this log can also be caused by a normal race condition when the session limits are reset, or when this node has been restarted after having previously had sessions with this partner LU. The session activation will fail with the specified sense code.

Recommended Action If this problem persists, check the session limits and active session counts on the specified local LU and partner LU.

Error Message

%SNASW-4-SM_LOG_13: EXCEPTION - [int] - BIND race with single-session partner LU - partner LU has lost race [chars]

Explanation A BIND race with a single-session partner LU has occurred. This is a normal network race condition. The race is resolved in favor of the LU with the higher name. In this case, the partner LU lost the race. The session activation will fail with the specified sense code.

Recommended Action No action is required.

Error Message

%SNASW-3-SM_LOG_14: PROBLEM - [int] - Detected consistency errors in received BIND request [chars]

Explanation The system has detected consistency errors in a received BIND request. This condition may indicate an interoperability problem. Sense codes are as follows:

- 0835xxxx—Parameter error at offset xxxx in BIND RU.
- 080F6051—Security error.

The session activation will fail with the specified sense code.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-SM_LOG_15: PROBLEM - [int] - Detected consistency errors in received BIND response [chars]

Explanation The system has detected consistency errors in a received BIND response. This may indicate an interoperability problem. Sense codes are as follows:

- 0835xxxx—A parameter error at offset xxxx in BIND RU has occurred.
- 080F6051—A security error has occurred.

The session will be deactivated with the specified sense code.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-SM_LOG_16: PROBLEM - [int] - Format error in received UNBIND request [chars]

Explanation The system has detected a format error in a received UNBIND request. This condition may indicate an interoperability problem. Sense codes are as follows:

- 0835xxxx—Parameter error at offset xxxx in UNBIND RU.
- 0895xxyy—Format error in control vector, where xx is the key of the control vector, and yy is the offset into the control vector of the byte in error.
- 10020000—RU length error.

The session will be deactivated with the specified sense code.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-4-SM_LOG_18: EXCEPTION - [int] - Unable to correlate received BIND response [chars]

Explanation The system is unable to correlate a received BIND response. This condition is probably a normal race condition. If a BIND request is followed immediately by an UNBIND request, and then by another BIND request that uses the same LFSID, the response to the first BIND request will not be correlated. The BIND response will be discarded.

Recommended Action No action is required.

Error Message

%SNASW-4-SM_LOG_20: EXCEPTION - [int] - Unable to correlate received INIT-SELF response or NOTIFY request [chars]

Explanation The system is unable to correlate a received INIT-SELF response or NOTIFY request. This is a normal race condition that is caused by deactivation of a session being deactivated before the INIT-SELF response has arrived. The request or response is discarded.

Recommended Action No action is required.

Error Message

%SNASW-4-SM_LOG_21: EXCEPTION - [int] - Unable to correlate received UNBIND request [chars]

Explanation The system is unable to correlate a received UNBIND request. This is a normal race condition that is caused by the crossing of UNBIND requests. The system will send a positive response to the UNBIND request.

Recommended Action No action is required.

Error Message

%SNASW-4-SM_LOG_30: EXCEPTION - [int] - Received ACTLU when LU already active [chars]

Explanation An ACTLU has been received when the LU was already active. The ACTLU will be rejected with the specified sense code.

Recommended Action Run a trace on the link station corresponding to the specified PU name and contact your Cisco technical support representative with details of the problem.

Error Message

%SNASW-3-SM_LOG_31: PROBLEM - [int] - Insufficient storage to activate LU-SSCP session [chars]

Explanation Available storage was insufficient for activating an LU-SSCP session. The ACTLU will be rejected with the specified sense code.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-SM_LOG_32: EXCEPTION - [int] - Unable to activate a new session since it would exceed the LU-mode session limit [chars]

Explanation The system was unable to activate a new session because the new session would exceed the LU-mode session limits. This is a normal race condition and should occur infrequently. The session activation will fail with the specified sense code which may cause ALLOCATE, MC_ALLOCATE or CMALLC requests to fail.

Recommended Action No action is required.

Error Message

%SNASW-3-SM_LOG_33: PROBLEM - [int] - Insufficient storage to reassemble received BIND response [chars]

Explanation Available storage was insufficient for reassembling a received BIND response. The session will be deactivated with the specified sense code.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-SM_LOG_34: PROBLEM - [int] - Badly formed partner LU name in received BIND request [chars]

Explanation A partner LU name on a received BIND request is badly formed. The session activation will fail with the specified sense code.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-SM_LOG_35: PROBLEM - [int] - Unrecognized mode name in received BIND request [chars]

Explanation The mode name on a received BIND request is unrecognized. The session activation will fail with the specified sense code.

Recommended Action Modify the partner LU configuration so it does not attempt to use the unrecognized mode.

Error Message

%SNASW-3-SM_LOG_36: PROBLEM - [int] - Unable to activate session to single session partner LU, because there is an active session on another mode [chars]

Explanation The system was unable to activate the session to a single session partner LU because there is already an active session on another mode. This condition usually indicates a contention between two or more APPC transaction programs or CPI-C applications for the same dependent LU 6.2. The session activation will fail with the specified sense code, which may cause ALLOCATE, MC_ALLOCATE or CMALLC requests to fail.

Recommended Action Collect a trace. Copy the message and trace information exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-6-SM_LOG_37: INFO - [int] - LU6.2 session activated [chars]

Explanation An LU 6.2 session has been activated.

Recommended Action No action is required.

Error Message

%SNASW-6-SM_LOG_38: INFO - [int] - LU6.2 session deactivated [chars]

Explanation An LU 6.2 session has been deactivated.

Recommended Action No action is required.

Error Message

%SNASW-4-SM_LOG_39: EXCEPTION - [int] - An LU-SSCP session activation attempt failed because the SSCP was not suitable [chars]

Explanation An ACTLU was received for an LU from the wrong SSCP. The ACTLU is rejected with the sense code 084B0000. The LU activation attempt has failed.

Recommended Action If it is required that the LU accept the ACTLU so that the activation attempt will succeed, change the LU definition so that either the LU requires the SSCP identifier that is received from the SSCP, or the LU accepts any SSCP identifier.

Error Message

%SNASW-4-SM_LOG_40: EXCEPTION - [int] - LU-mode session limit exceeded - BIND race [chars]

Explanation The LU-mode session limit has been exceeded because of a BIND race. This is normal race condition caused by an attempt of both the local LU and the partner LU to activate the last session on the mode simultaneously. The race will be resolved in favor of the node with the higher name. In this case the partner LU has lost the race. The session activation will fail with the specified sense code.

Recommended Action No action is required.

Error Message

%SNASW-3-SM_LOG_41: PROBLEM - [int] - FQPCID collision on received BIND request [chars]

Explanation An FQPCID collision has occurred. The FQPCID specified on a received BIND request matches the FQPCID being used for an existing active session. This condition can be caused by a collision in the hashing algorithm used to generate an FQPCID. Alternatively, this condition may indicate a problem in the node generating the FQPCID. The session activation will fail with the specified sense code.

Recommended Action If problem is persistent or occurs often, copy the message and trace information exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-SM_LOG_42: PROBLEM - [int] - Session identifier collision on received BIND request [chars]

Explanation A session identifier collision has occurred. The session identifier specified on a received BIND request matches the session identifier for an existing active session. The session activation will fail with the specified sense code.

Recommended Action If problem is persistent or occurs often, copy the message and trace information exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-6-SM_LOG_43: INFO - [int] - An LU-SSCP session has been activated for LU type 6.2 [chars]

Explanation An LU-SSCP session has been activated.

Recommended Action No action is required.

Error Message

%SNASW-6-SM_LOG_44: INFO - [int] - An LU-SSCP session has been deactivated for LU type 6.2 [chars]

Explanation An LU-SSCP session has been deactivated.

Recommended Action No action is required.

Error Message

%SNASW-3-SM_LOG_45: PROBLEM - [int] - LU-LU verification protocol mismatch. [chars]

Explanation The system has detected an LU-LU verification protocol mismatch. The partner LU has requested that the basic protocol be used when the local LU runs only the enhanced protocol with the partner LU. The local LU may be configured to run only the enhanced protocol with the partner LU

or it may be configured to run either protocol with the partner LU. The local LU has determined that the partner LU can run the enhanced protocol. This problem is a result of either a configuration mismatch, a migration problem, or a security attack. The session activation will fail.

Recommended Action Check the identity of the partner LU. If the problem is a configuration mismatch, reconfigure the verification protocol that the partner LU uses at the partner LU location. If the problem is a migration problem, upgrade the software at the partner LU location. If the problem is a security attack, investigate the security attack.

Error Message

```
%SNASW-3-SM_LOG_46: PROBLEM - [int] - LU-LU verification failed. [chars]
```

Explanation An LU-LU verification has failed. The partner LU has sent an incorrect response to a challenge sent by a local LU. This condition is either a configuration mismatch or a security attack. The session activation will fail.

Recommended Action Check the identity of the partner LU. If the condition is a result of a configuration mismatch, reconfigure the password either at the local LU or at the partner LU (or at both LUs) so that both LUs have the same password.

Error Message

```
%SNASW-3-SM_LOG_47: PROBLEM - [int] - LU-LU verification protocol failed. [chars]
```

Explanation Duplicate random data has been received. A list is kept of all random data sent as challenges by the local LU. The receipt of duplicate random data from a partner LU should be a rare event and is evidence of a security attack. The session activation will fail.

Recommended Action Check the identity of the partner LU. Check that the random number generators available to the local and partner LUs are of good quality and therefore unlikely to generate matching data. Investigate recurrences of this problem as security attacks.

Error Message

```
%SNASW-3-SM_LOG_48: PROBLEM - [int] - BIND(-RSP) request received in response to a BIND request [chars]
```

Explanation A BIND(-RSP) has been received in response to a BIND request. This condition may indicate a configuration error or a protocol error. Sense codes that typically indicate a configuration error or a normal race condition include the following:

- 0805xxxx—The session could not be activated because session activation limits have been reached.
- 08060014—The partner LU is not known.
- 0806xxxx—The BIND specified a resource that is not known.

- 080Fxxxx—Security authorization failed.
- 0821xxxx—The BIND supplied an invalid session parameter.
- 0835xxxx—A parameter error has occurred in BIND RU at offset xxxx.

Less common sense codes include the following:

- 0812xxxx—Session activation has failed because of a resource shortage at the remote node.
- 083Bxxxx—There was an invalid PCID in BIND RU.
- 0852xxxx—A duplicate session activation request was received.
- 0861xxxx—A CoS name in the BIND RU was invalid.
- 088Cxxxx—A control vector or subfield was missing from the BIND RU.
- 0895xxxx—The BIND RU contained a control vector that was in error.
- 0896xxxx—The BIND RU contained a control vector that was too long.

The session activation will fail with the specified sense code.

Recommended Action If the sense code indicates a configuration error, check for inconsistencies between the configuration at the local LU and the configuration at the partner LU. If the configuration is consistent and the problem persists, contact your Cisco technical support representative with details of the problem.

Error Message

```
%SNASW-4-SM_LOG_49: EXCEPTION - [int] - UNBIND request received in response to a
BIND request [chars]
```

Explanation An UNBIND request has been received in response to a BIND request. This condition may indicate a configuration error or a protocol error. Sense codes that typically indicate a configuration error or a normal race condition include the following:

- 0805xxxx—The session could not be activated because session activation limits have been reached.
- 08060014—The partner LU is not known.
- 0806xxxx—The BIND specified a resource that is not known.
- 080Fxxxx—Security authorization failed.
- 0821xxxx—The BIND supplied an invalid session parameter.
- 0835xxxx—A parameter error has occurred in the BIND RU at offset xxxx.

Less common sense codes include the following:

- 0812xxxx—Session activation failed because of resource shortage at the remote node.
- 083Bxxxx—There was an invalid PCID in the BIND RU.
- 0852xxxx—There was a duplicate session activation request.
- 0861xxxx—A CoS name in the BIND RU was invalid.

- 088Cxxxx—A control vector or subfield was missing from the BIND RU.
- 0895xxxx—The BIND RU contained a control vector that was in error.
- 0896xxxx—The BIND RU contained a control vector that was too long.

The session activation will fail with the specified sense code.

Recommended Action If the sense code indicates a configuration error, check for inconsistencies between the configuration of the local LU the partner LU. If the configuration is consistent and the problem persists, contact your Cisco technical support representative with details of the problem.

Error Message

%SNASW-4-SM2_LOG_0: EXCEPTION - [int] - Standard compression levels used [chars]

Explanation A BIND response was received that accepted session compression, but the BIND response did not specify the compression levels required. This condition occurred either because the response is from a back-level node or because the BIND request was shortened. If the compression level negotiation fails and the standard compression levels are used, compression will be used in both directions even though it may have been configured for one direction only.

Recommended Action No action is required.

Error Message

%SNASW-4-SM2_LOG_1: EXCEPTION - [int] - Failed to adjust a buffer pool [chars]

Explanation The desired number of buffers could not be reserved for a buffer pool. The receive pacing window size for the session will not increase as fast as configured.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-SS_LOG_4: EXCEPTION - [int] - Network Node server not required [chars]

Explanation The network node server is not required. This condition is logged when an APPN network node that does not support function set 1015 (back-level) attempts to activate CP-CP sessions with the SNA switch when the SNA Switch already has a network node server. The CP-CP session will be deactivated with the specified sense code. The SNA switch cannot subsequently use this network node as its server unless all links to it are deactivated and at least one link is restarted.

Recommended Action No action is required.

Error Message

%SNASW-3-SS_LOG_5: PROBLEM - [int] - CP capabilities exchange failed because of contention loser CP-CP session failure [chars]

Explanation A CP capabilities exchange has failed because of a contention loser CP-CP session failure. The contention winner CP-CP session will be deactivated. The SNA switch will attempt to reactivate CP-CP sessions with this adjacent CP.

Recommended Action The information in this log indicates that a CP-CP session has failed. Other logs give more details on the reason for the session failure such as insufficient resources or link failure.

Error Message

%SNASW-3-SS_LOG_7: PROBLEM - [int] - Insufficient storage to generate Alert CPSS003 [chars]

Explanation Available storage was insufficient for generating an Alert CPSS003 (protocol error in received BIND or LOCATE). The alert will not be sent.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-3-SS_LOG_8: PROBLEM - [int] - CP capabilities exchange failed because of protocol error [chars]

Explanation The CP capabilities exchange has failed because of a protocol error. This condition may indicate an interoperability problem. Sense codes are as follows:

- 08060030—CP capabilities requested by unknown CP.
- 08210002—CP capabilities requested on other than CPSVCMG mode.
- 08150007—CP capabilities requested when CP-CP session was already established.
- 08B60000—CP-CP sessions not supported by adjacent node.
- 08090039—CP transaction error.

CP-CP sessions with the specified adjacent node will be deactivated. The SNA switch will not attempt to reactivate CP-CP sessions with this adjacent CP.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-3-SS_LOG_9. : PROBLEM - [int] - Protocol error in CP capabilities exchange [chars]

Explanation The CP capabilities exchange has failed because of a badly formatted CP CAPS GDS variable. Sense codes are as follows:

- 10101000—CP capabilities length error.
- 10101002—Unexpected GDS identifier (not CP capabilities).

CP-CP sessions with the specified adjacent node will be deactivated. The SNA switch will not attempt to reactivate CP-CP sessions with this adjacent CP.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNASW-6-SS_LOG_11: INFO - [int] - Adjacent CP contacted [chars]

Explanation An adjacent CP has been contacted.

Recommended Action No action is required.

Error Message

%SNASW-6-SS_LOG_12: INFO - [int] - CP-CP sessions established [chars]

Explanation CP-CP sessions have been successfully established with the adjacent node.

Recommended Action No action is required.

Error Message

%SNASW-4-SS_LOG_13: EXCEPTION - [int] - Retrying CP-CP session activation after failure [chars]

Explanation The system is retrying CP-CP session establishment after an error has occurred.

Recommended Action No action is required.

Error Message

%SNASW-3-SS_LOG_16: PROBLEM - [int] - CP capabilities exchange failed because of contention winner CP-CP session failure [chars]

Explanation A CP capabilities exchange failed because of a contention winner CP-CP session failure. The contention loser CP-CP session will be deactivated. The SNA switch will attempt to reactivate CP-CP sessions with the adjacent CP.

Recommended Action The information in this log indicates that a CP-CP session has failed. Other logs give more details on the reason for the session failure such as insufficient resources or link failure.

Error Message

%SNASW-4-SS_LOG_17: EXCEPTION - [int] - CP-CP sessions established between network nodes in different networks [chars]

Explanation CP-CP sessions have been established between two network nodes in different networks. The CP-CP sessions will be deactivated with the specified sense code.

Recommended Action No action is required.

Error Message

%SNASW-6-SS_LOG_18: INFO - [int] - CP-CP sessions deactivated [chars]

Explanation CP-CP sessions to the adjacent node have been deactivated.

Recommended Action No action is required.

Error Message

%SNASW-4-SS_LOG_19: EXCEPTION - [int] - Insufficient resources to register LU on adjacent LEN [chars]

Explanation The branch network node has insufficient resources to register an LU on an adjacent LEN node. The LU resource may not be put into the directory and may not be accessible to other resources.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

Error Message

%SNASW-4-TC_LOG_0: EXCEPTION - [int] - Session pacing error [chars]

Explanation A session pacing error has occurred. This condition may indicate an interoperability problem. Sense codes are as follows:

- 20110000—Sender has overrun pacing window, or PI not set on first RU of window.
- 20110001—Unexpected IPM.
- 20110002—PI set on other than first RU in window.
- 20110003—Invalid pacing response.
- 10010003—Invalid IPM format.

The session will be deactivated with the specified sense code.

Recommended Action Use the information in the session deactivated problem log (271) to identify the local LU and partner LU. If more diagnostic information is required, run a trace on the specified link station and contact your Cisco technical support representative with the log and trace information.

Error Message

%SNASW-4-TC_LOG_1: EXCEPTION - [int] - Session segmentation error [chars]

Explanation A session segmentation error has occurred. This condition may indicate an interoperability problem. Sense codes are as follows:

- 80070000—Segmenting error.
- 80070001—Segmentation not supported on this link.

The session will be deactivated with the specified sense code.

Recommended Action Use the information on the session deactivated problem log (271) to identify the local LU and partner LU. If more diagnostic information is required, run a trace on the specified link station and contact your Cisco technical support representative with the log and trace information.

Error Message

%SNASW-4-TC_LOG_2: EXCEPTION - [int] - RU length error [chars]

Explanation An RU length error has occurred. This condition may indicate an interoperability problem. The session will be deactivated with the sense code 10020000 (RU length error).

Recommended Action For an LU 6.2 session, use the information on the session deactivated problem log (271) to identify the local LU and partner LU. If more diagnostic information is required, run a trace on the specified link station and contact your Cisco technical support representative with the log and trace information.

Error Message

%SNASW-4-TNBM_LOG_0: EXCEPTION - [int] - The Buffer Manager Monitor could not allocate necessary resource [chars]

Explanation The Buffer Manager Monitor could not allocate the necessary resources. The Buffer Manager will fail to operate. The Buffer Manager will fail to detect congestion conditions or relief from congestion, which could cause the node to lock up.

Recommended Action Shut down and restart the node.

Error Message

%SNASW-4-TNBM_LOG_1: EXCEPTION - [int] - Insufficient storage to create new buffer pool [chars]

Explanation Available storage was insufficient for creating a new buffer pool. Activation of some resources such as session or LS will fail. See other logs.

Recommended Action Investigate the memory shortage and the system load.

Error Message

%SNASW-4-TNBM_LOG_2: EXCEPTION - [int] - Insufficient buffers to create new buffer pool [chars]

Explanation Insufficient buffers were available to create a new buffer pool. Activation of some resources such as session or LS will fail. See other logs.

Recommended Action Investigate the buffer shortage and system load.

Error Message

%SNASW-4-TNBM_LOG_3: EXCEPTION - [int] - Critical buffer congestion [chars]

Explanation The Buffer Manager Monitor has detected critical buffer congestion. The SNA switch will throttle back session traffic by withholding pacing responses or resetting pacing windows on adaptive-paced sessions until the congestion has decreased. This condition can occur if the node receives a large, sudden burst of data traffic on several sessions.

Recommended Action The condition should clear itself automatically, but if the condition occurs frequently, it may indicate that the node is routing more sessions than it can handle efficiently with the available buffer storage. Reduce the number of sessions through the router.

Error Message

%SNASW-4-TNBM_LOG_4: EXCEPTION - [int] - Buffer congestion relieved [chars]

Explanation The buffer congestion has been relieved. The SNA switch will stop throttling back session traffic. If the congestion eases further, the SNA switch will start to increase pacing windows on adaptively paced sessions.

Recommended Action No action is required.

Error Message

%SNASW-4-TNBM_LOG_5: EXCEPTION - [int] - Critical buffer congestion detected while attempting to relieve congestion [chars]

Explanation The Buffer Manager detected critical buffer congestion while attempting to relieve a previous congestion condition. The SNA switch will throttle back session traffic by withholding pacing responses or resetting pacing windows on adaptive-paced sessions until the congestion has reduced. This condition can occur if the node receives a large, sudden burst of data traffic on several sessions.

Recommended Action The condition should clear itself automatically, but if it occurs frequently, it may indicate that the node is routing more sessions than it can handle efficiently with the available buffer storage. Reduce the number of sessions through the router.

Error Message

%SNASW-4-TNBM_LOG_6: EXCEPTION - [int] - Insufficient storage to request posting [chars]

Explanation Available storage was insufficient for requesting posting. The component using the Buffer Manager may fail to operate or may lock up. See other logs to determine the effects of this condition.

Recommended Action Investigate the memory shortage and the system load.

Error Message

%SNASW-4-TNTL_LOG_0: EXCEPTION - [int] - Implicit alias space wrapped [chars]

Explanation The space for implicit aliases has wrapped. There is a very slight possibility of duplicate aliases.

Recommended Action Shut down and restart to avoid any conflict.

Error Message

%SNASW-3-TNTL_LOG_1: PROBLEM - [int] - Invalid internal state detected [chars]

Explanation A software error has caused a bad internal state to be detected. This condition could result in a loss of system function. Refer to other problem logs for the actual effect.

Recommended Action Shut down and restart.

Error Message

%SNASW-3-TRACE: Diagnostic trace record too large for configured buffer. Buffer ID [hex]

Explanation A trace record could not be written to one of the cyclic trace buffers, because it was bigger than the available buffer space. The buffer will be cleared.

Recommended Action Increase the size of the relevant cyclic trace buffer or, if diagnostics are not currently necessary, disable the tracing.

Error Message

%SNASW-3-TRACE_2: Resizing of [chars] buffer failed due to insufficient memory; using buffer-size of [dec] KB.

Explanation A cyclic trace buffer could not be resized because of insufficient memory. The previously allocated buffer, if any, will continue to be used.

Recommended Action Reconfigure a smaller buffer size for the specified buffer type.

Error Message

%SNASW-4-TS_LOG_0: EXCEPTION - [int] - Unable to generate session route : unknown COS name [chars]

Explanation A CoS name that was specified for a session activation could not be associated with a valid CoS. The session activation will fail with the specified sense code.

Recommended Action Ensure that the origin node or its network node server does not use the unrecognized CoS in its mode-to-CoS mapping tables.

Error Message

%SNASW-4-TS_LOG_1: EXCEPTION - [int] - Unable to generate session route - no suitable TGs from origin node [chars]

Explanation No suitable TG could be found from the origin end node to the backbone network for the CoS that is specified for a session activation. This condition may be caused by a temporary link failure between the origin node and a network node. A session activation will fail with the specified sense code.

Recommended Action Check for a link failure at the origin node that explains the route failure. If no link failure is found, either change the mode-to-CoS mapping on the origin node or its network node server to use a different class of service, or reconfigure the network to ensure that a usable route exists from the origin node to the backbone network (for example, by defining or activating another link from the origin node to a network node).

Error Message

%SNASW-4-TS_LOG_2: EXCEPTION - [int] - Unable to generate session route - no suitable TGs to destination node [chars]

Explanation No suitable TG could be found from the backbone network to the destination end node for the CoS specified for a session activation. This condition may be caused by a temporary link failure between the destination node and a network node. The session activation will fail with the specified sense code.

Recommended Action Check for a link failure at the destination node that explains the route failure. If no link failure is found, either change the mode-to-CoS mapping on the origin node or its network node server to use a different class of service, or reconfigure the network to ensure that a usable route exists from the destination node to the backbone network (for example, by defining and/or activating another link from the destination node to a network node).

Error Message

%SNASW-4-TS_LOG_6: EXCEPTION - [int] - Unable to generate session route to adjacent node [chars]

Explanation No suitable TG could be found for a session activation to an adjacent node for the given CoS. This condition may be caused by a link failure. The session activation will fail with the specified sense code.

Recommended Action Check for a link failure that explains the failure. If no link failure is found, reconfigure the network to ensure that a usable link exists between this node and the specified adjacent node.

Error Message

%SNASW-4-TS_LOG_7: EXCEPTION - [int] - Unable to generate session route - RSCV truncated [chars]

Explanation The route selection control vector generated for the specified route was too long. The route selection control vector must be less than 256 bytes. The session activation will fail with the specified sense code.

Recommended Action Reconfigure the network to ensure that a short enough route exists between the origin and destination nodes.

Error Message

%SNASW-3-TS_LOG_13: PROBLEM - [int] - Failed to send alert due to insufficient memory [chars]

Explanation Insufficient memory was available to send an alert. The host will not see an alert. The following alert numbers identify the alert:

- 1—CPDB001
- 2—CPDB002
- 3—CPDB003
- 4,6—CPDB004
- 5,7—CPDB005

The alerts are detailed in the Management Services Reference (C30-3346). No other symptoms will be seen.

Recommended Action Either decrease the system load (for example, by reducing the number of active sessions) or make more storage available to the SNA switch.

SNMP Messages

The following are Simple Network Management Protocol (SNMP) error messages.

Error Message

```
%SNMP-3-AUTHFAIL: Authentication failure for SNMP req from host  
[dec].[dec].[dec].[dec]
```

Explanation An SNMP request was sent by the host at the address [dec].[dec].[dec].[dec], but the request PDU was not properly authenticated.

Recommended Action Make sure that the community and user name that are used in the SNMP request from the remote host have been configured on the router.

Error Message

```
%SNMP-3-BADOID: Attempt to generate an invalid object identifier
```

Explanation An attempt has been made to generate an object identifier that has fewer than two subidentifiers. A valid object identifier must contain at least two subidentifiers.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SNMP-3-BADVALUE: Maximum number of index supported is 20
```

Explanation An attempt has been made to generate an SNMP trap containing an MIB object whose instance identifier size has exceeded the maximum size. An SNMP trap contains some number of MIB objects, and the size of the instance identifier for these objects is restricted.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SNMP-3-CPUHOG: Processing [chars] of [chars]
```

Explanation SNMP has taken too much time to process a request.

Recommended Action If conditions warrant, use the **debug snmp packet** command to determine the contents of the SNMP request that is causing the message. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNMP-4-NOENGINEID: Remote snmpEngineID for [IP_address] not found when creating user: [chars]

Explanation An attempt to create a user has failed. This condition likely has occurred because the engine ID of the remote agent or SNMP Manager was not configured.

Recommended Action Configure the remote snmpEngineID and reconfigure the user. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNMP-4-NOFLASH: Reading snmpEngineBoots from flash failed

Explanation An attempt to read the snmpEngineBoots file from the Flash memory has failed. This condition most likely has occurred because the Flash memory card does not exist on the router. This message should appear only when the router is reloaded.

Recommended Action If a Flash memory card does not exist on the router, install a Flash memory card. If a Flash memory card exists already, its memory may be full. Erase the Flash memory and reload the router. If, after performing these steps, the problem persists, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNMP-3-TRAPBLOCK: Attempt to generate SNMP trap from a process with blocking disabled

Explanation During processing, a process with blocking disabled attempted to generate an SNMP trap that would block. A process that is configured this way is not allowed to use this function.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNMP-4-TRAPDROP: [chars]

Explanation An attempt was made to generate an SNMP trap, but the trap could not be sent. This condition most likely has occurred because the SNMP traps process is not running. More information will be given in the error message.

Recommended Action Use the **show process** command to determine whether the SNMP traps process is running. If the SNMP traps process is not running, reload the system. If, after reloading, the SNMP traps process is still not running, there may not be enough memory for it to run. If the steps described previously do not resolve the problem, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%SNMP-3-TRAPINTR: Attempt to generate SNMP trap from interrupt level`

Explanation The code attempted to generate an SNMP trap during the processing of an interrupt. This function is not allowed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%SNMP-5-WARMSTART: SNMP agent on host [chars] is undergoing a warm start`

Explanation The SNMP server was restarted.

Recommended Action This is a notification message only. No action is required.

SNMP_MGR Messages

The following are Simple Network Management Protocol (SNMP) proxy error messages.

Error Message

`%SNMP_MGR-3-BADAGETIMER: Unexpected age timer found on session [hex]`

Explanation The system has found an internal timer that should not be running.

Recommended Action Disable the SNMP Manager by entering the **no snmp-server manager** command. Then reenable the SNMP Manager by entering the **snmp-server manager** command. Entering these commands should effectively reset all of the internal structures. If entering this command sequence does not adequately resolve the problem, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%SNMP_MGR-4-BADAUTHTYPE: Unsupported SNMP authorization type: [int]`

Explanation The system has found an unknown SNMP authorization type. This condition may prevent the SNMP Manager from correctly sending and receiving SNMP messages to or from a particular SNMP agent.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNMP_MGR-3-BADINFORMTRANSPORT: Unknown inform transport type: [chars]

Explanation The destination of the specified SNMP inform has used an unknown transport type. The inform notification cannot be sent to the specified destination.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%SNMP_MGR-3-BADOP: Unknown operation code [int]

Explanation An SNMP PDU that has been delivered to the SNMP Manager contains an unknown operation code.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNMP_MGR-3-BADPDUTYPE: Received unknown PDU type: [int]

Explanation A PDU of an unknown type has been delivered to the SNMP Manager.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNMP_MGR-4-BADRESPONSESTATUS: Unknown response status code: [int]

Explanation The SNMP Manager process has received an internal response with an unknown status code.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNMP_MGR-3-BADTRANSPORT: Unknown transport type: [int]

Explanation A PDU from an unknown transport type has been delivered to the SNMP Manager.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNMP_MGR-3-BADUSECOUNT: Corrupted use counter found on session [hex]

Explanation A cached SNMP session structure might have been corrupted.

Recommended Action Disable the SNMP Manager by entering the **no snmp-server manager** command. Then reenable the SNMP Manager by entering the **snmp-server manager** command. Entering these commands should effectively reset all of the internal structures. If entering this command sequence does not adequately resolve the problem, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNMP_MGR-4-EMPTYQUEUE: Input queue is empty

Explanation The SNMP Manager process has received a notification to process its input queue, but the SNMP Manager process found the queue to be empty.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SNMP_MGR-3-MISSINGHOST: Cannot locate information on SNMP informs host:
[IP_address]

Explanation The system cannot locate configuration information about an SNMP informs host. The “informs destination” table entry for the specified SNMP cannot be found, and inform notifications will not be sent to this destination.

Recommended Action Enter the **show snmp host** and **show snmp** commands. Delete and readd the informs destination by entering the **snmp-server host** global configuration command to attempt to clear the condition. If entering this command fails to clear the condition, and you cannot determine the nature of the error from the error message text or from the **show snmp host** and **show snmp** command output, contact your Cisco technical support representative and provide the representative with the gathered information. Reloading the system may be necessary.

Error Message

%SNMP_MGR-4-NOCANCEL: Unable to cancel a previously sent inform request.

Explanation The number of unacknowledged inform requests issued has reached the configured maximum limit. To make resources available for sending out a new inform request, one of the older inform requests must be cancelled. The algorithm that is used to choose which inform request is the most appropriate one to cancel has failed to choose any. The new inform request will not be sent, and it will be dropped.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%SNMP_MGR-3-NOPROC: Failed to create SNMP Manager process`

Explanation The system was unable to initialize the SNMP Manager process. This condition is most likely due to a lack of memory.

Recommended Action Use the **show memory** command to examine the amount of available memory. If free memory is low, you may need to reconfigure or reload the system. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%SNMP_MGR-4-NOTENABLED: SNMP Manager not enabled (requested by [chars])`

Explanation A Cisco IOS application is attempting to use the SNMP Manager services, but the SNMP Manager functionality has not been enabled.

Recommended Action Enter the **snmp-server manager** command in global configuration mode to enable SNMP Manager services. The Cisco IOS application that is requesting these services is specified in the message. Alternatively, if it is not necessary for the Cisco IOS application that is requesting these services to use SNMP Manager services, disable or reconfigure the specified application so that it no longer makes SNMP Manager requests.

Error Message

`%SNMP_MGR-3-RESPDROP: Insufficient memory to handle response to request id [int]`

Explanation An SNMP response PDU has been received from a Cisco IOS application. There is not enough memory available to cache the response and return it to the original requesting Cisco IOS application. If this was a transient problem, the original SNMP request will likely be resent, and another SNMP response will be returned and delivered to the original Cisco IOS application that made the request.

Recommended Action If this message recurs, you will be required to free up some memory for the SNMP Manager to function. Enter the **show memory** command to determine if the available memory is low. You may be required to reconfigure or reload the system to make more memory available. Alternatively, you can disable the SNMP Manager by entering the **no snmp-server manager** command.

Error Message

`%SNMP_MGR-3-SESSIONINUSE: Attempt to destroy session [hex] that is still in use`

Explanation An attempt has been made to remove a cached SNMP session structure, but the session is still in use and should not be removed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SOI Messages

The following are Simple Network Management Protocol (SNMP) over interprocess communication (IPC) error messages.

Error Message

%SOI-2-BADPXMCOMMUNITY: PXM's community string (length [dec]) was invalid. Limits are [dec] to [dec].

Explanation The system has received an invalid PXM community string.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SOI-2-BADPXMIPADDR: PXM's IP address (length [dec]) was invalid. Must be [dec].

Explanation The system has received an invalid PXM IP address.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SOI-2-BADPXMMESSAGE: Message from PXM had a type [dec] which is unknown.

Explanation The system has received an unknown message from the PXM.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SOI-2-PORTCREERR: Unable to create the SNMP Over IPC comm port [chars] to the PXM.

Explanation An attempt to create a communication port to the PXM has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SOI-2-PORTLOCERR: Unable to locate the SNMP Over IPC comm port [chars] to the PXM.

Explanation An attempt to locate an already open port to the PXM has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SOI-2-PORTOPENERR: Unable to open the SNMP Over IPC comm port [chars] to the PXM.

Explanation An attempt to open a communication port to the PXM has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SOI-2-PORTREGFAIL: SNMP Over IPC : IPC Port registry for port [chars] failed.

Explanation An SNMP over IPC request to register an IPC port has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SOI-2-QUEUCREATFAIL: Unable to create the SNMP over IPC watched queue.

Explanation An SNMP over IPC watched queue could not be created.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SONET Messages

The following are Synchronous Optical Network (SONET) error messages.

Error Message

%SONET-4-ALARM: [chars]: [chars] [chars]

Explanation The specified SONET alarm has been declared or released.

Recommended Action Repair the source of the alarm.

Error Message

%SONET-3-APSCOMM: [chars]: [chars]

Explanation An APS error related to connectivity between the working and the protect routers has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SONET-3-APSCOMMEST: [chars]: Link to [chars] channel established - protocol version [dec]

Explanation APS has established connectivity between the working and protect routers.

Recommended Action This is an informational message only. No action is required.

Error Message

%SONET-3-APSCOMMLOST: [chars]: Link to [chars] channel lost

Explanation Connectivity between the working and protect routers has been lost. APS operation is able to continue in degraded mode.

Recommended Action Restore connectivity between the working and protect routers.

Error Message

%SONET-4-APSM: APS mode mismatch - [chars]

Explanation A unidirectional/bidirectional mismatch has been detected by the APS system.

Recommended Action Match the router configuration with the provisioned circuit.

Error Message

%SONET-3-APSNCHN: APS Local request [dec] has no corresponding channel number

Explanation The APS software has malfunctioned.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SONET-3-APSNCHN: APS No interfaces available for IP connection

Explanation APS requires an out-of-band path for interrouter communication.

Recommended Action Configure an out-of-band path for interrouter APS communication.

Error Message

%SONET-3-BADAUTH: APS Bad authentication from [IP_address],

Explanation The APS software has detected an unauthorized message. This message could result from improper configuration, unauthorized access, or packet corruption.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SONET-3-BADVER: APS version mismatch; this system ver [dec]; other ver [dec] -
msg rejected:
```

Explanation The APS software has detected an invalid version number in the hello message.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SONET-3-MISVER: [chars]: APS version mismatch.
WARNING: Loss of Working-Protect link can deselect both
protect and working interfaces. [chars] router requires
software upgrade for full protection.
```

Explanation The APS software has detected that either the working or the protect router requires a software upgrade. APS operation can continue prior to the upgrade.

Recommended Action Upgrade the specified router.

Error Message

```
%SONET-3-NOBUFFER: No buffer available for sending APS message
```

Explanation No data buffer was available to send an APS message.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SONET-3-NOSOCKET: Unable to open socket
```

Explanation The APS system was unable to open a socket for communication purposes.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SONETMIB Messages

The following are Synchronous Optical Network (SONET) Management Information Base (MIB) error messages.

Error Message

```
%SONETMIB-1-DELETE: could not delete interface, if_index=[dec]
```

Explanation The specified interface was not removed from the queue successfully.

Recommended Action No action is required.

Error Message

%SONETMIB-1-MALLOCNEW: Malloc failed for new interface=[dec]

Explanation The system was unable to allocate enough memory to create a SONET MIB structure for the new interface.

Recommended Action No action is required.

Error Message

%SONETMIB-3-NULLCFGPTR: NULL SONET MIB config pointer, if_index=[dec]

Explanation The system has attempted to initialize the SONET MIB using a NULL pointer.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SONICT Messages

The following are SONIC Ethernet interface-related error messages.

Error Message

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

Explanation A failure has occurred in the initialization sequence of the sonicT chip.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the **show cont e0/0/x** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show cont e0/0/x** output, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SONICT-2-NOMEMORY: Unit [dec], no memory for [chars]

Explanation An operation could not be accomplished because of a low memory condition. The current system configuration, network environment, or possibly a software error might have exhausted or fragmented the system memory.

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

SPAN Messages

The following are Spanning Tree Protocol error messages.

Error Message

```
%SPAN-4-DST_ALREADY_DST: Interface(s) [chars] already configured as monitor destinations in other monitor sessions
```

Explanation The specified interface or interfaces are already configured as a monitor destination in another monitor session and will be ignored. All other monitor destinations that are being configured are applied.

Recommended Action Choose a SPAN destination interface that is not a SPAN destination in any other SPAN session, or remove the SPAN destination configuration from another session before configuring it as a SPAN source interface.

Error Message

```
%SPAN-4-DST_ALREADY_SRC: Interface(s) [chars] already configured as monitor sources
```

Explanation The specified interface or interfaces are already configured as a monitor source in this or another monitor session and will be ignored. All other monitor destinations that are being configured are applied.

Recommended Action Choose a SPAN destination interface that is not a SPAN source in any SPAN session, or remove the SPAN source configuration before configuring it as a SPAN destination interface.

Error Message

```
%SPAN-4-FTR_ALREADY_SRC: Configuring filter VLANs [chars], but there are already source VLANs configured.
```

Explanation Filter VLANs are being configured, but source VLANs are already configured in the same monitoring session. Filter VLANs and source VLANs are not allowed to be configured at the same time.

Recommended Action Choose a SPAN filter VLAN that is not already a SPAN source VLAN, or remove the SPAN source VLAN configuration before configuring a SPAN filter VLAN.

Error Message

```
%SPAN-3-MEM_UNAVAIL: Memory was not available to perform the SPAN operation
```

Explanation The system was unable to perform a SPAN operation because of a lack of memory.

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

Error Message

%SPAN-4-RXOVFL: This platform allows a maximum of [dec] RX monitor interface(s)

Explanation The number of interfaces that are being monitored in the RX direction exceeds the maximum number allowed on this platform. All interfaces beyond the number allowed are ignored.

Recommended Action Be aware that not all interfaces requested to be configured were actually configured. Enter the **show monitor** command in EXEC mode to see which interfaces were actually configured.

Error Message

%SPAN-4-SRC_ALREADY_DST: Interface(s) [chars] already configured as monitor destinations

Explanation At least one interface that is being configured as a monitor source is ignored because it is already configured as a monitor destination in this or another monitor session. All other monitor destinations that are being configured are applied.

Recommended Action Choose a SPAN source interface that is not a SPAN destination in any SPAN session, or remove the SPAN destination configuration from the interface before configuring it as a SPAN source interface.

Error Message

%SPAN-4-SRC_ALREADY_FTR: Configuring source VLANs [chars], but there are already filter VLANs configured.

Explanation Source VLANs are being configured, but filter VLANs are already configured in the same monitoring session. Filter VLANs and source VLANs are not allowed to be configured at the same time.

Recommended Action Choose a SPAN source VLAN that is not already a SPAN filter VLAN, or remove the SPAN filter VLAN configuration before configuring a SPAN source VLAN.

Error Message

%SPAN-4-TXOVFL: This platform allows a maximum of [dec] TX monitor interface(s)

Explanation The number of interfaces being monitored in the TX direction exceeds the maximum number allowed on this platform. All interfaces beyond the number allowed are ignored.

Recommended Action Be aware that not all interfaces requested to be configured were actually configured. Enter the **show monitor** command in EXEC mode to see which interfaces were actually configured.

Error Message

%SPAN-3-UNKN_ERR: An internal error occurred during a SPAN operation.

Explanation SPAN has detected an error in its internal operation.

Recommended Action The error might be transient, and retrying the SPAN operation might be successful. If retrying the SPAN operation fails, the switch might need to be reloaded to complete the desired operation.

Error Message

%SPAN-3-UNKN_ERR_PORT: An internal error occurred when configuring SPAN on port [chars]

Explanation SPAN has detected an error in its internal operation.

Recommended Action The error might be transient, and retrying the SPAN operation might be successful. If retrying the SPAN operation fails, the switch might need to be reloaded to complete the desired operation.

SPANTREE Messages

The following are Spanning Tree error messages.

Error Message

%SPANTREE-7-BLOCK_PORT_TYPE: Blocking [chars] on [chars]. Inconsistent port type.

Explanation The specified interface has an inconsistent port type and is being held in a spanning-tree blocking state until the port type inconsistency is resolved.

Recommended Action Verify that the configuration and operational state of the listed interface and that of the interface to which it is connected have the same mode (access or trunk). If the mode is trunk, verify that both interfaces use the same encapsulation (ISL or 802.1Q). When these parameters are consistent, spanning tree will automatically unblock the interfaces as appropriate.

Error Message

%SPANTREE-2-BLOCK_PVID_LOCAL: Blocking [chars] on [chars]. Inconsistent local vlan.

Explanation The spanning-tree port with the specified spanning-tree instance and interface has a port VLAN ID inconsistency and will be held in spanning-tree blocking state until the port VLAN ID inconsistency is resolved. The specified spanning-tree instance is that of the native VLAN ID of the specified interface.

Recommended Action Verify that the configuration of the native VLAN ID is consistent on the interfaces on each end of the 802.1Q trunk connection. Once the configuration is corrected, spanning tree will automatically unblock the interfaces as appropriate.

Error Message

%SPANTREE-2-BLOCK_PVID_PEER: Blocking [chars] on [chars]. Inconsistent peer vlan.

Explanation The spanning-tree port with the specified spanning-tree instance and interface has a port VLAN ID inconsistency and will be held in spanning-tree blocking state until the port VLAN ID inconsistency is resolved. The specified spanning-tree instance is that of the native VLAN ID of the interface on the peer switch to which the specified interface is connected.

Recommended Action Verify that the configuration of the native VLAN ID is consistent on the interfaces on each end of the 802.1Q trunk connection. Once the configuration is corrected, spanning tree will automatically unblock the interfaces as appropriate.

Error Message

%SPANTREE-3-PORT_SELF_LOOPED: [chars] disabled.- received BPDU src mac ([enet]) same as that of interface

Explanation The source MAC address contained in a BPDU that was received on the specified interface matches the MAC address assigned to that interface. This indicates that a port may be looped back to itself. This condition might be caused by a diagnostic cable that is being plugged in. The interface will be administratively shutdown.

Recommended Action Check the interface configuration and any cable plugged into the interface. Once the problem is resolved, reenable the interface by entering the **no shutdown** command in interface configuration mode.

Error Message

%SPANTREE-2-RECV_1Q_NON_1QTRUNK: Received 802.1Q BPDU on non 802.1Q trunk [chars] [chars].

Explanation The specified interface on which an SSTP BPDU was received was in trunk mode, but the specified interface was not using 802.1Q encapsulation.

Recommended Action Verify that the configuration and operational state of the listed interface and that of the interface to which it is connected have the same mode (access or trunk). If the mode is trunk, verify that both interfaces use the same encapsulation (ISL or 802.1Q). Once these parameters are consistent, spanning tree will automatically unblock the interfaces as appropriate.

Error Message

%SPANTREE-7-RECV_1Q_NON_TRUNK: Received 802.1Q BPDU on non trunk [chars] [chars].

Explanation An SSTP BPDU that was not operationally a trunk has been received on the specified interface.

Recommended Action Verify that the configuration and operational state of the listed interface and that of the interface to which it is connected have the same mode (access or trunk). If the mode is trunk, verify the same encapsulation (none, ISL or 802.1Q). Once these parameters are consistent, spanning tree will automatically unblock the interfaces as appropriate.

Error Message

%SPANTREE-2-RECV_BAD_TLV: Received SSTP BPDU with bad TLV on [chars] [chars].

Explanation The specified interface has received a SSTP BPDU that was missing the VLAN ID tag. The BPDU is discarded.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SPANTREE-2-RECV_PVID_ERR: Received BPDU with inconsistent peer vlan id [dec] on [chars] [chars].

Explanation The specified interface has received an SSTP BPDU that is tagged with a VLAN ID that does not match the VLAN ID on which the BPDU was received. This condition occurs when the native VLAN is not consistently configured on both ends of a 802.1Q trunk.

Recommended Action Verify that the configuration of the native VLAN ID is consistent on the interfaces on each end of the 802.1Q trunk connection. Once this inconsistency is corrected, spanning tree will automatically unblock the interfaces as appropriate.

Error Message

%SPANTREE-2-RX_PORTFAST: Received BPDU on PortFast enabled port. Disabling [chars].

Explanation A BPDU that has spanning-tree portfast enabled was received on the specified interface. Since the Spanning Tree BPDU Guard is also enabled, the interface is administratively shutdown.

Recommended Action Verify the configuration of portfast on the interface. If portfast behavior is desired, verify that the interface is connected to a host or router only and not to a bridge or a switch. After resolving the conflict, reenable the interface by entering the **no shutdown** command in interface configuration mode.

Error Message

%SPANTREE-2-UNBLOCK_CONSIST_PORT: Unblocking [chars] on [chars]. Port consistency restored.

Explanation The Port VLAN ID and/or Port Type inconsistencies have been resolved. Spanning tree will now unblock the specified interface of the specified spanning-tree instance as appropriate.

Recommended Action No action is required.

SPANTREE_FAST Messages

The following are Spanning Tree Fast Convergence error messages.

Error Message

%SPANTREE_FAST-7-PORT_FWD_UPLINK: [chars] [chars] moved to Forwarding (UplinkFast).

Explanation The specified interface has been selected as the new root port for the listed spanning-tree instance.

Recommended Action No action is required.

SPARC Messages

The following are Cisco 3800 SPARC coprocessor subsystem error messages.

Error Message

`%SPARC-3-DOWN: SPARC process is not responding, [chars]`

Explanation The SPARC coprocessor subsystem is not responding to configuration commands. The SPARC coprocessor will be restarted automatically when this condition occurs. This is not a normal condition. Recurrence of the problem could indicate a hardware failure.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SPE Messages

The following are Service Processing Element (SPE) error messages.

Error Message

`%SPE-3-MSMGR_REGISTRATION_ERR: Failed to register [chars] with Modem Service Manager`

Explanation Port Management has failed to register with the Modem Service Manager.

Recommended Action No action is required.

Error Message

`%SPE-6-NULL_OBJ: SPE object [chars] is unavailable.`

Explanation Information about the specified SPE could not be retrieved. The SPE may not exist.

Recommended Action No action is required.

Error Message

`%SPE-3-PM_DB_NO_MEM: Failed to allocate [chars] for slot [dec]`

Explanation Port Management has failed to allocate memory to create a slot object.

Recommended Action No action is required.

Error Message

`%SPE-3-PM_DIRECT_MODEM_QUERY_ERR: Failed to find the response buffer for modem [chars] command`

Explanation Modem direct query responses could not find a buffer to send data to the router shelf.

Recommended Action No action is required.

Error Message

%SPE-3-PM_SLOT_NO_MODULES: Database reported 0 modules for slot [dec]

Explanation The card in this slot should contain multiple modules. However, the database indicates that the card in this slot contains no modules.

Recommended Action No action is required.

Error Message

%SPE-3-RECOVERY_DNLD_MAINT_NO_MEM: Recovery Download Maintenance ran out of chunk memory; [chars]

Explanation The Recovery Download Maintenance messages cannot be sent.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SPE-6-SM_BUSIEDOUT: SPE [chars] busiedout(maintenance will be allowed)

Explanation The SPE is temporarily taken out of service. Maintenance activities can still be performed.

Recommended Action No action is required.

Error Message

%SPE-6-SM_CLEARED: SPE [chars] Cleared

Explanation The SPE will be redownloaded with the configured firmware.

Recommended Action No action is required.

Error Message

%SPE-3-SM_CRASHED: SPE [chars] crashed

Explanation The firmware running on the SPE has been aborted.

Recommended Action No action is required.

Error Message

%SPE-6-SM_DEFER_DOWNLOAD: SPE [chars] : Firmware download deferred

Explanation The firmware download for the SPE is postponed due to active calls.

Recommended Action No action is required.

Error Message

%SPE-3-SM_DOWNLOAD_FAILED: SPE [chars] is BAD - [chars].

Explanation The SPE has failed to download, and it will be marked as bad.

Recommended Action No action is required.

Error Message

%SPE-3-SM_EVENT_NO_MEM: SPE SM out of event buffers; [chars] [chars]

Explanation The PM SPE state machine has run out of event memory.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SPE-3-SM_POST_FAILED: SPE [chars] is BAD.

Explanation The SPE has failed the POST, and it will be marked as bad.

Recommended Action No action is required.

Error Message

%SPE-3-SM_RESPONSE_NO_MEM: SPE SM out of response buffers

Explanation The PM SPE state machine has run out of response event memory.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SPE-6-SM_SHUTDOWN: SPE [chars] shutdown

Explanation The SPE has been taken out of service. Maintenance activities cannot be performed.

Recommended Action No action is required.

Error Message

%SPE-6-SM_START_DOWNLOAD: SPE [chars] : Firmware download initiated

Explanation Firmware download for the SPE has been initiated.

Recommended Action No action is required.

Error Message

%SPE-4-SPE_ACT_SESS_WARN: Active session count = [dec]. Country code not set

Explanation The country code cannot be set on a system with active sessions.

Recommended Action No action is required.

Error Message

%SPE-4-SPE_CONFIG_WARN: Country Code Trunk card mismatch for.

Explanation A country code that was configured may not work with the trunk card.

Recommended Action No action is required.

Error Message

%SPE-6-SPE_DNLD_MAINT: [chars] [chars]

Explanation This message provides information about the download maintenance that is running.

Recommended Action This is an informational message only. No action is required.

Error Message

%SPE-6-SPE_DNLD_MAINT_PROCESS: [chars]

Explanation This message provides information about the download maintenance process.

Recommended Action This is an informational message only. No action is required.

Error Message

%SPE-3-ST_API_ERR: PM failed to create [chars].

Explanation Port Management has failed to initialize the CSM event processing component.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SPE-3-ST_EVENT_NO_MEM: PM ST failed to create [chars].

Explanation Port Management has failed to allocate dynamic chunk memory for event logging.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SRCP_APP Messages

The following are Simple Resource Coordination Protocol (SRCP) application error messages.

Error Message

%SRCP_APP-6-DNS_QUEUE_FAILED: Failed to create DNS message watched queue\n

Explanation The system has failed to create a DNS message watched queue.

Recommended Action Check free memory size to ensure that there is enough memory to perform the requested operation. Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

%SRCP_APP-6-PROCESS_CREATION_FAILED: Cannot create SRCP application process\n

Explanation The system has failed to create the SRCP application process.

Recommended Action Check free memory size to ensure that there is enough memory to perform the requested operation. Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

%SRCP_APP-6-SOCKET_OPEN_FAILED: Failed to open UDP port for SRCP\n

Explanation The system has failed to open a UDP port for the SRCP process.

Recommended Action Check if any other applications use the same UDP port number (2427).

Error Message

%SRCP_APP-6-SYS_QUEUE_FAILED: Failed to create SRCP system message watched queue\n

Explanation The system has failed to create an SRCP system message watched queue.

Recommended Action Check free memory size to ensure that there is enough memory to perform the requested operation. Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

SRP Messages

The following are Spatial Reuse Protocol (SRP) error messages.

Error Message

%SRP-4-ALARM: [chars] Side [char] Keepalive [chars]

Explanation The specified network has a physical line error condition.

Recommended Action Diagnose and repair the physical error.

Error Message

`%SRP-3-DUP_MAC_ADDR: [chars] : Duplicate mac addresses in topology`

Explanation The topology contains one or more duplicate MAC addresses.

Recommended Action Identify the duplicate address and correct the configuration.

Error Message

`%SRP-3-RING_ID_ERROR: [chars] : Rx side [chars], Tx side of fiber originates on side [chars]`

Explanation The fiber on the specified side is remotely connected to the wrong side.

Recommended Action Verify that each side A is connected to side B and that each side B is connected to side A.

Error Message

`%SRP-3-SINGLE_NODE_TOPO: [chars] : Single node in topology`

Explanation The topology discovery has resulted in a single node being found.

Recommended Action This condition can be caused by duplicate MAC addresses. Identify the MAC address of the interface and ensure it is not duplicated on other nodes. If the node is in loopback, disregard this message.

SSE Messages

The following are silicon switching engine (SSE) error messages.

Error Message

`%SSE-3-BADMEMORY: SSE memory failure detected, orig [hex] [hex], tested [hex] [hex]`

Explanation A memory error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

`%SSE-2-BOGUSEQ: SSE bogus equal branch [hex], [hex], [dec] [hex]`

Explanation The data structures that are used by the SSE have an internal inconsistency.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%SSE-3-COMPERR: SSE compilation failure -- [chars]
```

Explanation A software failure has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%SSE-2-HUNG: SSE hung -- [chars]
```

Explanation The SSE has locked up.

Recommended Action Reboot the SSE.

Error Message

```
%SSE-2-HWFAILURE: SSE hardware failure -- [chars] code [hex]
```

Explanation A hardware error has occurred. This condition indicates an unexpected condition on the Silicon Switch Processor (SSP) board.

Recommended Action It might be necessary to replace the SSP. Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%SSE-2-MEMERROR: SSE memory failure, address [hex],  
expected [hex], got [hex]
```

Explanation A hardware error has occurred. This condition indicates a memory failure on the Silicon Switch Processor (SSP) board.

Recommended Action It might be necessary to replace the SSP. Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%SSE-2-NESTADDR: SSE nested addresses detected, protocol [dec] [IP_address]

Explanation The data structures used by the SSE have an internal inconsistency.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%SSE-2-NOMATCH: SSE delete didn't end at a match node, type [char], value [dec], address [IP_address], bytecount [dec], high [dec], state [dec]

Explanation The data structures used by the SSE have an internal inconsistency.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%SSE-2-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. This error indicates an unexpected condition on the Silicon Switch Processor (SSP) board.

Recommended Action It might be necessary to replace the SSP. Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%SSE-2-SWFAILURE: SSE software failure -- [chars] [hex]

Explanation A software failure has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

SSH Messages

The following are Secure Shell (SSH) Protocol error messages.

Error Message

`%SSH-5-DISABLED: SSH [dec].[dec] has been disabled`

Explanation The SSH protocol has been disabled for connections.

Recommended Action This is an informational message only. No action is necessary.

Error Message

`%SSH-5-ENABLED: SSH [dec].[dec] has been enabled`

Explanation The SSH protocol has been enabled for connections.

Recommended Action This is an informational message only. No action is necessary.

Error Message

`%SSH-3-KEYPAIR: Attempt to generate server keys failed - error code: [chars]`

Explanation A server RSA keypair could not be generated.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%SSH-3-PRIVATEKEY: Unable to retrieve RSA private key for [chars]`

Explanation An RSA private key does not exist or is corrupted.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SSRP Messages

The following are error messages for the SONET/SDH based SRP Double Wide PCI port adapter driver.

Error Message

`%SSRP-3-UNSUPPORTED: [chars]\n`

Explanation The SSRP hardware is not supported on this platform.

Recommended Action Upgrade the system to support the SSRP hardware.

STANDBY Messages

The following are Hot Standby Router Protocol (HSRP) error messages.

Error Message

```
%STANDBY-3-BADAUTH: Bad authentication from [IP_address], remote state [chars]
```

Explanation Two routers that are participating in HSRP disagree about the valid authentication string.

Recommended Action Enter the **standby authentication interface** command to repair the HSRP authentication discrepancy between the local system and the router whose IP address is reported.

Error Message

```
%STANDBY-3-DIFFVIP1: [chars] Group [dec] active routers virtual  
IP address [IP_address] is different to the locally configured  
address [IP_address]
```

Explanation The HSRP virtual IP address contained in the Hello message from the active router is different from the HSRP virtual IP address that is configured on the local router.

Recommended Action Check the configuration on all HSRP routers.

Error Message

```
%STANDBY-3-DUPADDR: Duplicate address [IP_address] on [chars], sourced by [enet]
```

Explanation The router has received an HSRP message on the interface. The IP address in the HSRP message is the same as the IP address of the router. This condition may be caused by a network loop, a misconfiguration, or a malfunctioning switch.

Recommended Action Ensure that there are no network loops. Check the configuration on all the HSRP routers. Ensure that any switches are configured correctly and functioning properly.

Error Message

```
%STANDBY-3-DUPVIP1: [chars] Group [dec] address [IP_address] is  
already assigned to [chars] group [dec]
```

Explanation The system cannot learn the HSRP virtual IP address contained in the hello message as the HSRP virtual IP address is already assigned to a different HSRP group.

Recommended Action Check the configuration on all HSRP routers.

Error Message

```
%STANDBY-3-DUPVIP2: [chars] Group [dec] address [IP_address] is  
already assigned on this interface
```

Explanation The system cannot learn the HSRP virtual IP address contained in the hello message as the HSRP virtual IP address is already assigned to this interface.

Recommended Action Check the configuration on all HSRP routers.

Error Message

%STANDBY-3-DUPVIP3: [chars] Group [dec] address [IP_address] is already assigned to, or overlaps with, an address on another interface or application

Explanation The system cannot learn the HSRP virtual IP address contained in the hello message as it is already assigned to, or overlaps with, an address on another interface or application.

Recommended Action Check the configuration on all HSRP routers.

Error Message

%STANDBY-3-MISCONFIG: Attempt to change [chars] MAC address to [enet] when DECNET already running

Explanation A software or hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%STANDBY-3-NOSOCKET: Unable to open socket

Explanation The system was unable to initialize an IP connection for HSRP.

Recommended Action Ensure that there is at least one interface configured to run IP.

Error Message

%STANDBY-6-STATECHANGE: Standby: [dec]: [chars] state [chars] -> [chars]

Explanation The router has changed its state.

Recommended Action No action is required.

STUN Messages

The following are serial tunnel (STUN) error messages.

Error Message

%STUN-3-BADCONN: CONN: bad connection ([dec]), peer: [chars]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%STUN-3-BADLENOP: [chars]: bad len or unknown op, op [dec], len [dec]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%STUN-3-BADMAGIC: [chars]: wrong magic, mine [hex], theirs [hex] ([dec])
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%STUN-3-BADMAGICTCP: [chars]: peer [chars], wrong magic, mine [hex], theirs [hex]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%STUN-3-BADPASSIVEOPEN: passive open from [IP_address]([dec]) -> [dec] failed
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%STUN-3-CONNILLSTATE: CONN: Peer [chars], illegal state [dec]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%STUN-6-CONNOPENFAIL: CONN: peer [chars] open failed, [chars] [[int]]
```

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-4-ERR: [chars]: [chars]: [chars], op [hex], len [dec]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

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 is temporary under normal conditions.

Recommended Action Reconfigure the STUN group. Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration. If memory shortages recur, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%STUN-3-NOINPIDB: Input idb not set

Explanation A software or hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%STUN-2-NOMEMORY: No memory available: [chars]

Explanation The requested operation has 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

%STUN-2-NOTGI: Please remove and redefine protocol group [dec]

Explanation An internal error has occurred because of an irregular configuration.

Recommended Action Remove and reconfigure the STUN protocol group. Record the configuration. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%STUN-6-OPENED: [chars]: peer [chars] opened, [previous state [chars]]

Explanation A connection attempt to a remote peer has been completed successfully (OPENED, PASSIVE-OPEN) or is in the process of being opened (OPENING). This is normal behavior.

Recommended Action No action is required.

Error Message

%STUN-6-OPENING: CONN: opening peer [chars], [dec]

Explanation A connection attempt to a remote peer has been completed successfully (OPENED, PASSIVE-OPEN) or is in the process of being opened (OPENING). This is normal behavior.

Recommended Action No action is required.

Error Message

%STUN-6-PASSIVEOPEN: passive open [IP_address]([dec]) -> [dec]

Explanation A connection attempt to a remote peer has been completed successfully (OPENED, PASSIVE-OPEN) or is in the process of being opened (OPENING). This is normal behavior.

Recommended Action No action is required.

Error Message

%STUN-6-PEERSHUTDOWN: shutting down peer [chars] on [chars]

Explanation A connection to a remote peer is being shut down. This condition typically occurs because STUN was being reconfigured or disabled by the user. This is normal behavior.

Recommended Action No action is 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, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation A remote peer has reestablished a connection to this router.

Recommended Action No action is required.

Error Message

```
%STUN-3-SENDPUNT: [chars]: sent [chars] to [chars]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%STUN-3-SENDPUNTTCP: [chars]: sent [chars] to ([[int]])[IP_address]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation A remote peer has closed a STUN connection with this router. This condition can be caused by normal events (for example, reconfiguring the router).

Recommended Action Examine the other router to see why it closed this connection with this peer.

Error Message

```
%STUN-6-TCPPEERSHUT: [chars] [chars], [IP_address]([dec])
```

Explanation This router has closed a STUN connection with a remote peer. This condition can be caused by normal events (for example, reconfiguring the router).

Recommended Action Examine this router to see why it closed this connection with this peer.

SUBSYS Messages

The following are software subsystems error messages.

Error Message

```
%SUBSYS-2-BADCLASS: Bad subsystem class ([dec]) - ignoring subsystem
```

Explanation A software consistency check has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SUBSYS-2-BADSEQUENCE: Subsystem ([chars]) has cross-class sequence for ([chars])

Explanation A software or hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SUBSYS-2-BADVERSION: Bad subsystem version number ([dec]) - ignoring subsystem

Explanation A software consistency check has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SUBSYS-2-MISMATCH: Kernel and subsystem version differ ([dec].[dec]) - ignoring subsystem

Explanation A software consistency check has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SUBSYS-2-NOTFOUND: Subsystem ([chars]) needs subsystem ([chars]) to start

Explanation A software consistency check has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SUBSYS-3-PAGEZERO: The [chars] class subsystem [chars] was being initialized.

Explanation In all Cisco products, the first 256 bytes of memory is unused and off limits. Newer platforms have hardware to immediately trap reads or writes to this area. Older platforms periodically perform checks on this memory. This message appears only on older platforms and indicates that this off-limits memory area has been modified.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SUBSYS-2-RECURSION: Maximum sequence depth exceeded ([dec]) by ([chars])

Explanation A software or hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SW56 Messages

The following are switch 56K error messages.

Error Message

%SW56-3-ERR_MSGQ: [chars]

Explanation The system has failed to send a message to the internal software process.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SW56-1-INITSYS: [chars]

Explanation The SW56 initialization has failed. This condition is most likely caused by a lack of memory.

Recommended Action The amount of memory available in the router may not be sufficient. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SWITCH Messages

The following are switch interface error messages.

Error Message

%SWITCH-1-NOMEMORY: Unit [dec], no memory for [chars]

Explanation The CPU has been unable to access the memory it needs to carry out its functions. This condition might be caused by a large network that requires a lot of memory for routing tables. This condition might also be caused by a router configuration that has many features enabled because each feature requires a certain amount of memory. This condition might also be caused by a software error (for example, a memory leak).

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

SW_VLAN Messages

The following are Virtual LAN (VLAN) manager error messages.

Error Message

```
%SW_VLAN-4-BAD_PM_VLAN_COOKIE_RETURNED: VLAN manager unexpectedly received a bad PM VLAN cookie from the Port Manager, VLAN indicated: [dec]
```

Explanation The VLAN manager has received an upcall from the Port Manager which contained a VLAN cookie that translated to a bad VLAN number.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%SW_VLAN-4-BAD_VLAN_CONFIGURATION_FILE: VLAN configuration file contained incorrect verification word: [hex]
```

Explanation The VLAN manager has read a VLAN configuration file that did not begin with a correct value which indicates a valid VLAN configuration file. The VLAN configuration file has been rejected.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SW_VLAN-4-BAD_VLAN_CONFIGURATION_FILE_VERSION: VLAN configuration file contained unknown file version: [dec]
```

Explanation The VLAN manager has read a VLAN configuration file that contained an unrecognized file version number. This condition may indicate an attempt to regress to an older version of the VLAN manager software.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SW_VLAN-4-BAD_VLAN_TIMER_ACTIVE_VALUE: Encountered incorrect VLAN timer active value: [chars]
```

Explanation Because of a software error, a VLAN timer has been detected active when it should have been inactive, or was detected inactive when it should have been active.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SW_VLAN-4-IFS_FAILURE: VLAN manager encountered file operation error: call =  
[chars] / code = [dec] ([chars])  
/ bytes transfered = [dec]
```

Explanation The VLAN manager has received an unexpected error return from a Cisco IOS file system call.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SW_VLAN-4-NO_PM_COOKIE_RETURNED: VLAN manager unexpectedly received a null  
[chars] type cookie from the Port  
Manager, data reference: [chars]
```

Explanation The VLAN manager has queried the Port Manager for a reference cookie but received a NULL pointer instead.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%SW_VLAN-6-OLD_CONFIG_FILE_READ: Old version [dec] VLAN configuration file  
detected and read OK. Version [dec]  
files will be written in the future.
```

Explanation The VLAN software has detected an old version of the VLAN configuration file format. The VLAN software was able to interpret the file but will create files using the new format in the future.

Recommended Action No action is required.

Error Message

```
%SW_VLAN-3-VLAN_PM_NOTIFICATION_FAILURE: VLAN Manager synchronization failure  
with Port Manager over [chars]
```

Explanation Because of a lack of ready pool space, the VLAN manager has dropped a notification from the Port Manager as indicated in the error message.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SW_VLAN-4-VTP_INTERNAL_ERROR: VLAN manager received an internal error [dec] from  
vtp function [chars]: [chars]
```

Explanation The VLAN manager has received an unexpected error code from the VTP configuration software.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%SW_VLAN-4-VTP_INVALID_DATABASE_DATA: VLAN manager received bad data of type  
[chars]: value [dec] from vtp database  
function [chars]
```

Explanation The VLAN manager has received invalid data from a VTP configuration database routine.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%SW_VLAN-4-VTP_INVALID_EVENT_DATA: VLAN manager received bad data of type [chars]:  
value [dec] while being called  
to handle a [chars] event
```

Explanation The VLAN manager has received invalid data from the VTP configuration software.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%SW_VLAN-3-VTP_PROTOCOL_ERROR: VTP protocol code internal error: [chars]
```

Explanation The VTP protocol code has encountered an unexpected error while a configuration request, packet, or timer expiration was being processed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

SYS Messages

The following are operating system error messages.

Error Message

```
%SYS-2-ALREADYFREE: Buffer [hex] already in free pool [chars]
```

Explanation A block of memory at the specified location is corrupt.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-3-BADBLOCK: Bad block pointer [hex]
```

Explanation A block of memory at the indicated location is corrupt.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-2-BADBUFFER: Attempt to use [chars] buffer as [chars], ptr= [hex], pool=[hex]
```

Explanation An internal software failure has occurred during an attempt to process a buffer. This message occasionally indicates a hardware problem.

Recommended Action Verify that the hardware installed in the router is supported by the Cisco IOS image. Look for other log messages that might indicate a hardware failure, such as parity errors. If these messages are absent, this is probably a software failure. To take advantage of recent fixes, upgrade your system to the latest Cisco IOS software release in your release train. If the problem persists, copy the error message text exactly as it appears on the console or in the system log, enter the **show log** and **show tech-support** commands, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-3-BADDISP: Bad disposal code [hex] in [chars]
```

Explanation A buffer deletion routine has received an invalid status code. The buffer memory will be correctly returned to the free pool, but it will not be correctly counted in the per-protocol statistics.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-3-BADFREEMAGIC: Corrupt free block at [hex] (magic [hex])

Explanation A block of memory at the indicated location is corrupt.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-3-BADFREEPTRS: Bad [chars] pointer [hex] at [hex] ([chars] = [hex])

Explanation There is a corrupt pointer in the block header at the indicated location.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-3-BADLINKTYPE: Unexpected linktype [dec]

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-BADLIST: Regular expression access check with bad list [dec]

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-3-BADMAGIC: Corrupt block at [hex] (magic [hex])

Explanation The free memory pool is corrupted.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-2-BADPID: Bad pid [dec] for tty [t-line]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-2-BADPOOL: Attempt to use buffer with corrupt pool pointer, ptr= [hex], pool= [hex]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-2-BADPOOLMAGIC: Attempt to use pool pointer with corrupt header, pool= [hex]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-3-BADPRINT: Process has no associated tty (in [chars]).
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-3-BADPROCESS: Bad process ID ([dec]) when [chars] process table

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-3-BADREFCOUNT: Bad reference count at [hex] (refcount [hex])

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-3-BAD_RESET: Questionable reset of process [dec] on tty[t-line]

Explanation A process has been reset before the process was complete.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-BADSHARE: Bad refcount in [chars], ptr=[hex], count=[hex]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-2-BADSTACK: Process [chars] has trashed stack, old size [dec]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-6-BLKINFO: [chars]blk [hex], words [int], alloc [hex], [chars], dealloc [hex], rfcnt [hex]
```

Explanation This is an auxiliary message that is generated by one of several memory-related messages. This message provides a formatted display of some of the information in the header of a corrupted data block. This message provides additional information only.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-6-BOOT_MESSAGES: Messages above this line are from the boot loader.
```

Explanation At least one informational or error message has been printed by the boot loader.

Recommended Action If the system image has been loaded, no action is recommended. If the system image did not load as configured, send a log file and the configuration information to your Cisco technical support representative.

Error Message

```
%SYS-6-BOOTTIME: Time taken to reboot after reload = [dec] seconds
```

Explanation This is an informational message for the user. This message provides information about the time taken for the router to come up after a reload or a crash.

Recommended Action No action is required.

Error Message

%SYS-2-CFORKBADFUNCT: Can't create process with start address = [hex]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-CFORKLEV: Process creation of [chars] failed (at level [dec]).

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-CFORKMEM: Process creation of [chars] failed (no memory).

Explanation Because a software error has occurred, no memory is available to create a process.

Recommended Action To take advantage of recent fixes, upgrade your system to the latest Cisco IOS software release in your release train. If the problem persists, copy the error message text exactly as it appears on the console or in the system log, enter the **show log** and **show tech-support** commands, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-CHUNKBADELESIZE: Chunk element size is more than 64k for [chars]

Explanation The chunk manager cannot function properly with big chunk elements.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-CHUNKBADFREEMAGIC: Bad free magic number in chunk header, chunk [hex] data [hex] chunk_freemagic [hex]

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-2-CHUNKBADMAGIC: Bad magic number in chunk header, chunk [hex] data [hex]
chunkmagic [hex] chunk_freemagic [hex]
```

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-2-CHUNKBADPOOLSIZE: Bad poolsize returned by the system : [int]
```

Explanation The system has returned an inappropriate pool size.

Recommended Action Ensure that the pool sizes are changed. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-2-CHUNKBADREFCOUNT: Bad chunk reference count, chunk [hex] data [hex].
```

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-2-CHUNKBOUNDS: Could not find the sibling to allocate memory from. Chunk
[chars], total free [dec] inuse [dec].
```

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-2-CHUNKBOUNDSIB: Error noticed in the sibling of the chunk [chars], Chunk
index : [dec], Chunk real max : [dec]
```

Explanation An internal software failure has occurred.

Recommended Action Since this message is software-related, consider upgrading your system to the latest Cisco IOS software release in your release train to take advantage of recent fixes. If the problem persists, copy the error message text exactly as it appears on the console or in the system log, enter the **show log** and **show tech-support** commands, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-CHUNKEXPANDFAIL: Could not expand chunk pool for [chars]. No memory available

Explanation There is not enough processor memory left to expand this chunk pool.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-CHUNKFREE: Attempted to free nonchunk memory, chunk [hex], data [hex].

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-CHUNKINCONSIS: Inconsistant counters for chunk : [chars]total free [dec]/[dec], total sibs [dec]/[dec], total alloc [dec]/[dec]

Explanation The system has returned an inappropriate pool size.

Recommended Action Ensure that the pool sizes are changed. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-CHUNKINVALIDHDR: Invalid chunk header type [dec] for chunk [hex], data [hex]

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-CHUNKNOMEMORY: Could not allocate chunks for [chars]. No memory

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-CHUNKNOROOT: Root chunk need to be specified for [hex]

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-CHUNKPARTIAL: Attempted to destroy partially full chunk, chunk [hex].

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-CHUNKSIBLINGS: Attempted to destroy chunk with siblings, chunk [hex].

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-5-CONFIG: Configured from [chars]

Explanation The router configuration has been changed.

Recommended Action This is an informational message only. No action is required.

Error Message

%SYS-2-CONFIG_DOWNFAIL: Generated configuration not backward compatible

Explanation The router has been configured to generate nonvolatile memory using the commands of an older software version. The current configuration of the router contains a command that cannot be saved using only the older command set.

Recommended Action Allow the router to save the configuration using the command set of the current software version, or remove the commands that cannot be saved using the older command set.

Error Message

%SYS-5-CONFIG_I: Configured from [chars] by [chars]

Explanation The router configuration has been changed.

Recommended Action This is a notification message only. No action is required.

Error Message

%SYS-4-CONFIG_NEWER: Configuration from version [dec].[dec] may not be correctly understood

Explanation The software has detected that the configuration saved in memory was written by a newer version of software. There might be commands saved in memory that are not implemented by the older software version.

Recommended Action Examine all the messages printed while the router was booting. For each message about an unknown command, determine whether that feature is required. If any of the unknown command features is required, upgrade to a newer version of software that supports the required feature.

Error Message

%SYS-4-CONFIG_NOLOCK: The configuration could not be locked

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-3-CONFIG_NO_PRIVATE: No space remaining to save private config

Explanation A software or hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-5-CONFIG_NV: Nonvolatile storage configured from [chars]

Explanation The configuration was written successfully.

Recommended Action This is a notification message only. No action is required.

Error Message

%SYS-3-CONFIG_NV_DATA: Variable [chars] not set properly in the routine [chars].

Explanation A write error has occurred to a nonvolatile configuration because an internal variable was not set properly.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-3-CONFIG_NV_ERR: Nonvolatile storage write error; configuration failed

Explanation A write error has occurred for a nonvolatile configuration.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-5-CONFIG_NV_I: Nonvolatile storage configured from [chars] by [chars]

Explanation The configuration has been written successfully.

Recommended Action This is a notification message only. No action is required.

Error Message

%SYS-4-CONFIG_NV_OVERRUN: Non config data present at the end of nvram is corrupted

Explanation The software has detected that the configuration saved into NVRAM has overlaid a part of the NVRAM that had been occupied by nonconfiguration data files. These files are typically used by SNMP to store and retrieve nonconfiguration persistent data across a system reload.

Recommended Action Compress the configuration and store or copy it to Flash memory as appropriate.

Error Message

%SYS-3-CONFIG_SYS_ERR: System running-config write error; configuration failed

Explanation The write of the running configuration of the system has failed.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-3-CPUHOG: Task ran for [dec] msec ([dec]/[dec]), process = [chars], PC = [hex].
```

Explanation The indicated process has run for too long a period of time without relinquishing the processor. The process is a “CPU hog.”

Recommended Action If this message appears during startup or during OIR of a card, no action is required. If this message appears when accessing a Flash memory device, consider replacing the affected Flash memory device. If this message occurs during normal router operation, it is most probably caused by a software failure. To take advantage of recent fixes, upgrade your system to the latest Cisco IOS software release in your release train.

Error Message

```
%SYS-3-CRASHINFOINITFAIL: Crashinfo subsystem initialization did not add registry crashinfo_get_default_file_name.
```

Explanation The crashinfo subsystem does not have the correct registry.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-3-DMPMEM: [hex]: [hex] [hex] [hex] [hex] [hex] [hex]
```

Explanation A software or hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-4-DUAL_MESSAGE: SNMP system message request [dec] denied because of pending job
```

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-3-DUP_TIMER: Same tty[t-line] in linewatch_timers, type [dec]
```

Explanation A tty has appeared twice in a timer list in which it should have appeared only once.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-EXCEPTIONDUMP: System Crashed, Writing Core....

Explanation The system has crashed because of an exception. A core dump is being generated.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-FREEBAD: Attempted to free memory at [hex], not part of buffer pool

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-FREEFREE: Attempted to free unassigned memory at [hex], alloc [hex], dealloc [hex]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-GETBUF: Bad getbuffer, bytes= [dec]

Explanation The software has requested a buffer that is larger in size than the largest configured buffer size, or the software has requested a sized buffer with a size less than zero.

Recommended Action Check the minimum memory requirements for your system configuration. If your system meets those requirements, this message is probably caused by a software failure. To take advantage of recent fixes, upgrade your system to the latest Cisco IOS software release in your release train. If the problem persists, copy the error message text exactly as it appears on the console or in the system log, enter the **show log** and **show tech-support** commands, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-2-GETBUFFFAIL: [chars] buffer allocation ([dec] bytes) failed from [hex]
```

Explanation An operation could not be accomplished because of a low memory condition. The router memory has been exhausted or fragmented. This condition may be caused by the current system configuration, the network environment, or a software error.

Recommended Action Check the minimum memory requirements for your system configuration. If your system meets those requirements, this message is probably caused by a software failure. To take advantage of recent fixes, upgrade your system to the latest Cisco IOS software release in your release train. If the problem persists, copy the error message text exactly as it appears on the console or in the system log, enter the **show tech-support**, **show log**, **show process memory** and **show memory summary** commands, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-3-HARIKARI: Process [chars] top-level routine exited
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-2-INLIST: Buffer in list, ptr= [hex]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-2-INLIST1: Buffer in list, ptr= [hex], caller= [hex]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYS-2-INPUTQ: INPUTQ set, but no IDB, ptr=[hex]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-INSCHED: [chars] within scheduler

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-3-INTPRINT: Illegal printing attempt from interrupt level.

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-INTSCHED: '[chars]' at level [dec]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-3-INUSEFREE: Block [hex] on free list [dec] in use

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-4-INVALID_IMAGE: Running invalid image for platform!

Explanation The software image that is being run is intended for a different hardware architecture. This problem can occur on a Cisco 1003, Cisco 1004, or Cisco 1005 router. The Cisco 1003 and Cisco 1004 routers use a different image from the Cisco 1005 router.

Recommended Action Install the correct software image.

Error Message

%SYS-3-INVMEMINT: Invalid memory action ([chars]) at interrupt level

Explanation An interrupt handler has attempted to allocate or deallocate memory.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-LINKED: Bad [chars] of [hex] in queue [hex]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-3-LOGGER_DROPPED: System dropped [dec] console debug messages.

Explanation Debugging or informational messages are being generated faster than they can be displayed on the console. This message replaces the lost messages.

Recommended Action To reduce the number of debugging or informational messages that are displayed, use conditional debugging and turn off console logging. Enter the **no logging console guaranteed** command, or turn off link-state messages for some other interfaces.

Error Message

%SYS-3-LOGGER_FLUSHED: System was paused for [time-stamp] to ensure console debugging output.

Explanation Debugging or informational messages are being generated faster than they can be displayed on the console. To ensure that the messages could be seen, the rest of the system has been paused until the console output could catch up. This condition might cause an interruption in time-critical operations (for example, maintaining an ISDN link).

Recommended Action To reduce the number of debugging or informational messages that are displayed, use conditional debugging and turn off console logging. Enter the **no logging console guaranteed** command, or turn off link-state messages for some other interfaces.

Error Message

%SYS-3-LOGGER_FLUSHING: System pausing to ensure console debugging output.

Explanation Debugging or informational messages are being generated faster than they can be displayed on the console. To ensure that the messages could be seen, the rest of the system has been paused until the console output catches up. This condition might cause an interruption in time-critical operations (for example, maintaining an ISDN link).

Recommended Action To reduce the number of debugging or informational messages that are displayed, use conditional debugging and turn off console logging. Enter the **no logging console guaranteed** command, or turn off link-state messages for some other interfaces.

Error Message

%SYS-2-LOWMEM: Low-memory debug exception (limit=[int] free=[int])

Explanation The router is configured to crash when total available memory drops below a specified threshold. The specified threshold has been reached.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-MALLOCFAIL: Memory allocation of [dec] bytes failed from [hex], pool [chars], alignment [dec]

Explanation The requested memory allocation is not available from the specified memory pool. The router memory has been exhausted or fragmented. This condition may be caused by the current system configuration, the network environment, or a software error.

Recommended Action Check the minimum memory requirements for your system configuration. If your system meets those requirements, this condition is probably caused by a software failure. To take advantage of recent fixes, upgrade your system to the latest Cisco IOS software release in your release train.

Error Message

%SYS-6-MEMDUMP: [hex]: [hex] [hex] [hex] [hex]

Explanation This is an auxiliary message that is generated by one of several memory-related messages. This message provides a formatted display of some of the information in the header of a corrupted data block. This message provides additional information only.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information. Include the previously printed error message.

Error Message

%SYS-3-MGDTIMER: [chars][chars], timer = [hex].

Explanation A software or hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information. Include the previously printed error message.

Error Message

%SYS-3-MGDTMRRUN: TTY[t-line]: Managed Timer(s) [chars] still running

Explanation One or more managed timers for a tty that had been deleted are still running.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-3-MSGLOST: [dec] messages lost because of queue overflow

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

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 This is an auxiliary message that is generated by one of several memory-related messages. This message provides the address of the memory block and the calling program counter for the last eight blocks allocated and for the last eight blocks freed. This message provides additional information only.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-NOBLOCK: [chars] with blocking disabled.

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-6-NOBRIDGE: Bridging software not present

Explanation An attempt has been made to use bridging software when the system is not configured to be used as a bridge.

Recommended Action Configure the bridging software.

Error Message

%SYS-3-NOELEMENT: [chars]:Ran out of buffer elements for enqueue

Explanation The process has run out of buffer elements and is unable to enqueue data.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the **show buffers** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show buffers** command output, call your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%SYS-2-NOMEMFRG: Memory fragmentation check debug exception (fragment size [int])

Explanation The router is configured to crash when the largest available contiguous memory block drops below a specified threshold. The specified threshold has been reached.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-NOMEMORY: No memory available for [chars] [dec]

Explanation An operation could not be accomplished because of a low memory condition. The current system configuration, network environment, or possibly a software error might have exhausted or fragmented the router memory.

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

Error Message

%SYS-2-NOPROCESS: No such process [dec]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-NOTDEAD: Killing process [chars], pid [dec] again

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-NOTQ: [chars] didn't find [hex] in queue [hex]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-NULLCHUNK: Memory requested from Null Chunk

Explanation The chunk manager cannot allocate memory from null chunks

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-3-NULLIDB: Null IDB in [chars]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-7-NV_BLOCK_INIT: Initalized the geometry of nvram

Explanation The software has initialized the NVRAM block geometry, which is a part of the NVRAM that hosts nonconfiguration data files. These nonconfiguration data files are used by SNMP to store and retrieve nonconfiguration persistent data across a system reload.

Recommended Action No action is required.

Error Message

%SYS-4-NV_BLOCK_INITFAIL: Unable to initialize the geometry of nvram

Explanation The software has detected that it had failed to initialize the NVRAM block geometry, which is a part of the NRAM that hosts nonconfiguration data files. These nonconfiguration data files are used by SNMP to store and retrieve nonconfiguration persistent data across a system reload. This reload may happen when the entire NRAM is occupied with the configuration data and the newer version of software that supports this feature cannot find the minimum room required in the NVRAM to initialize the block file system.

Recommended Action Reduce the configurations in the NVRAM by at least 2K.

Error Message

%SYS-4-NV_CHKSUM: An nvram checksum is already in progress

Explanation The user has attempted to perform multiple NVRAM operations at the same time. If the interrupt is not set, the system will attempt the NVRAM operation again.

Recommended Action No action is required unless the command fails. If the command fails, reset the interrupt.

Error Message

%SYS-4-NV_CHKSUM_INTR: An nvram checksum is already in progress; the interrupt cannot be serviced

Explanation An interrupt service routine has attempted to perform a checksum on the NVRAM contents. The interrupt service found that the resource was in use.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-4-NV_NOLOCK: Failed to acquire an nvram lock

Explanation An interrupt service routine has attempted to acquire a semaphore lock. The attempt has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-3-NZREFCNT: Block [hex] on free list [dec] with refcount [dec]

Explanation A block of memory that is in the free pool is in use by a process. The message will indicate the number of processes using the memory block.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-5-OUTSETUP: Configuration file [chars] accepted, aborting setup

Explanation The system has accepted a configuration over the network. The setup session will be aborted. This is an informational message only.

Recommended Action No action is required.

Error Message

%SYS-3-OVERRUN: Block overrun at [hex] (red zone [hex])

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation The environmental monitor has detected a high-temperature condition.

Recommended Action Ensure that the room temperature is not too high and that air flow to the card is not blocked. If this condition persists, the environmental monitor might shut down the system. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-3-OVFPRINT: Overflow in [chars], chars [dec], buffer size [dec]

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-6-PROCINFO: Process [chars] just finished executing

Explanation This message is an auxiliary to the SYS-3-OVERRUN and SYS-3-BADMAGIC error messages. This message identifies the process or process fragment that was executing when the error occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information. Include the information gathered with the SYS-3-OVERRUN and SYS-3-BADMAGIC error messages.

Error Message

%SYS-2-QCOUNT: Bad [chars] [hex] count [dec]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-6-READ_BOOTFILE_FAIL: [chars] [chars].

Explanation A configured boot system command has failed.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-4-REGEXP: [chars].

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-5-RELOAD: Reload requested

Explanation A reload or restart has been requested.

Recommended Action This is an informational message only. No action is required.

Error Message

%SYS-4-RELOAD_ATTEMPT: Attempt via SNMP failed, system shutdown not configured

Explanation An attempt to reload the router has failed because SNMP reloads are not currently configured on the router. SNMP cannot be used to reload the router unless this functionality has been previously configured.

Recommended Action This is an informational message only. No action is required.

Error Message

%SYS-5-RESTART: System restarted -- [chars]

Explanation A request to reload or restart the system has been made.

Recommended Action This is an informational message only. No action is required.

Error Message

%SYS-2-SELFLINKED: Buffer [hex] linked to itself in free pool [chars]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-SHARED: Attempt to return buffer with sharecount [dec], ptr= [hex]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-SHARED1: Attempt to return buffer with sharecount [dec], ptr= [hex], caller= [hex]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-SIGNAL: Process aborted on invalid signal, signum = [dec].

Explanation An attempt has been made to send an invalid signal to another process.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-SNMP0IDX: Attempt to [chars] snmpidb with if_index of 0

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-4-SNMP_HOSTCONFIGSET: SNMP hostConfigSet request. Loading configuration from [IP_address]

Explanation SNMP is reading the host configuration from a network host.

Recommended Action This is an informational message only. No action is required.

Error Message

%SYS-4-SNMP_NETCONFIGSET: SNMP netConfigSet request. Loading configuration from [IP_address].

Explanation SNMP is reading the network configuration from a network host.

Recommended Action This is an informational message only. No action is required.

Error Message

%SYS-4-SNMP_WRITENET: SNMP WriteNet request. Writing current configuration to [IP_address]

Explanation SNMP is writing the current configuration to a network host.

Recommended Action This is an informational message only. No action is required.

Error Message

%SYS-3-SOCKUNKN: Unknown socket protocol [dec]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-6-STACKLOW: Stack for [chars] [chars] running low, [dec]/[dec]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-5-TABLEERR: [chars] table [chars] damaged: [chars].

Explanation An internal table entry has become corrupt.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-6-TESTINFO: Scheduler test [hex] (for [chars]) just executed

Explanation This is an auxiliary message to the SYS-3-OVERRUN and SYS-3-BADMAGIC error messages. This message identifies the process or process fragment that was executing when the error occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information. Include the information that was gathered with the SYS-3-OVERRUN and SYS-3-BADMAGIC error messages.

Error Message

%SYS-3-TIMERHOG: Timer callback ran long, PC = [hex].

Explanation The indicated callback routine has run for too long a period of time without relinquishing the processor.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-3-TIMERNEG: Cannot start timer ([hex]) with negative offset ([dec]).

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-WATCHDOG: Process aborted on watchdog timeout, process = [chars].

Explanation The indicated process has run for too long a period of time without relinquishing the processor. The system has shut down the indicated process.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation A free buffer has been placed in a list of free buffers that was not the correct list for the indicated buffer.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYS-2-WRONGPOOL: Buffer [hex] found in pool [hex], should be in pool [hex]

Explanation A software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SYSCTLR Messages

The following are system controller subsystem error messages.

Error Message

```
%SYSCTLR-5-AUTH_FAILED: MD5 digest does not match, SDP packet received from, [IP_address] rejected
```

Explanation A SDP hello packet has been received from a shelf that is not trusted.

Recommended Action Either specify the correct SDP password or specify the correct destination on the shelf from which this message was received.

Error Message

```
%SYSCTLR-3-BAD_CALL: Invalid parameter/mangled pointer routine: [chars], file: [chars], line: [dec]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYSCTLR-6-BAD_IP_ADDR: Found Shelf [dec] with an invalid IP address [chars]
```

Explanation The system controller has found a shelf that has an invalid IP address.

Recommended Action Configure a valid IP address for the shelf that has an invalid IP address.

Error Message

```
%SYSCTLR-3-DISCOVER_SOCKET_BIND: socket bind failed
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYSCTLR-3-DISCOVER_SOCKET_OPEN: socket open failed
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYSCTLR-3-DUPLICATE_SHELF: SDP packet with duplicate shelf-id [dec] received from [chars], already discovered shelf located at [chars]

Explanation A shelf has been configured to use a shelf ID that is already in use by another shelf. Two shelves cannot be configured to use the same shelf ID.

Recommended Action Change the shelf ID for one of the two shelves.

Error Message

%SYSCTLR-4-HMON_POLL: Local time [chars] [chars] on shelfid [dec] is not active, resetting monitor_type [dec]

Explanation Health monitor setup commands poll the system for information. If this message is displayed every 10 minutes, the health monitor has been unable to set the corresponding entry on the shelf.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYSCTLR-3-HMON_SETUP_FAILED: Health monitoring setup failed on shelf_id [dec]

Explanation The health monitor has failed to set up the monitoring command on the specified shelf.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYSCTLR-3-INVALID_SDP_VERSION: SDP packet received by system controller contained invalid version number.

Explanation The system has received an SDP packet that contains an invalid version number.

Recommended Action Ensure that the shelf is running a compatible version of SDP. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYSCTLR-4-SDP_TIMEOUT: Hello packet from shelf [dec] not received, shelf removed.

Explanation No SDP hello packets have been received from the specified router shelf. That shelf could be down or misconfigured.

Recommended Action Verify the status of the router and the router configuration. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYSCTLR-3-SDP_TIMER_ERROR: No context associated with the expired SDP timer

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYSCTLR-6-SHELF_ADD: Shelf [dec] discovered located at address [IP_address]

Explanation SDP on a system controller has detected a particular shelf.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYSCTLR-4-SHELF_CONF_CHANGED: Configuration for the shelf [dec] located [IP_address] changed

Explanation SDP on a system controller has detected that a particular shelf configuration has changed.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYSCTLR-3-SHELF_MSGFAIL: Unable to send message [dec] to process with pid [dec].

Explanation The system is unable to send a message to a specific process because the performance collector process has terminated.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYSCTLR-3-SHELF_PROTO: Shelf id protocol error

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYSCTLR-4-SHELF_RELOAD: Shelf [dec] located [IP_address] reloaded

Explanation A system controller that is using SDP has detected that a particular shelf has reloaded.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYSCTLR-4-SHELF_REMOVE: Shelf [dec] located at address [IP_address] removed.

Explanation A system controller that is using SDP has not received hello packets from a particular shelf.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYSCTLR-6-SHELF_RESTORED: Communication with shelf [dec] located at address [IP_address]

Explanation SDP on a system controller has detected a particular shelf.

Recommended Action No action is required.

Error Message

%SYSCTLR-4-SNMP_NOT_RESPONDING: Shelf [dec] not reachable via SNMP

Explanation The shelf that is specified in this error message is not responding to SNMP requests.

Recommended Action Verify that the SNMP configuration for the shelf that is indicated is correct. Also verify that the correct community string has been specified in the configuration command system-controller community on the system controller.

SYSLOG_SERVER Messages

The following are syslog-server file system routines error messages.

Error Message

%SYSLOG_SERVER-3-CREATE_ERR: Failed to create a Syslog file.

Explanation The system has failed to create a syslog file. This condition occurs if there is not a PCMCIA disk in slot0 of the system controller.

Recommended Action Verify that the PCMCIA disk is properly installed.

Error Message

%SYSLOG_SERVER-4-DUP_FILE: Syslog file [[chars]] exists.

Explanation An attempt has been made to use a directory name that already exists on the PCMCIA disk.

Recommended Action Verify that the name that was supplied already exists on the PCMCIA disk and enter a new directory name.

Error Message

%SYSLOG_SERVER-4-FILE_CORRUPTED: syslog records do not appear to be timestamped.

Explanation The system has been unable to detect a time stamp on a system log. This error might be the result of not using the **service timestamp log datetime** command.

Recommended Action Use the **service timestamps log datetime** command on your router. This command will tell the system to time-stamp both debugging and logging messages. To use this function, the date and time must be set.

Error Message

%SYSLOG_SERVER-3-ILLEGAL_FS: Illegal file system [chars].

Explanation The system has detected an illegal file system.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYSLOG_SERVER-3-MFS_MAX: Failed to add Syslog file [chars], maximum Syslog files [dec].

Explanation The system was unable to add a syslog file because the system has already exceeded the maximum number of syslog files allowed.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYSLOG_SERVER-4-NO_CONFIG_CHANGE: No configuration change.

Explanation No configuration change to the syslog server has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYSLOG_SERVER-4-NO_MEM: No memory left.

Explanation No more memory is available for the system controller.

Recommended Action Provide the system controller with more memory. Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

%SYSLOG_SERVER-4-NO_MOBIUS: No syslog file.

Explanation There is no syslog file.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYSLOG_SERVER-3-OPEN_FILE_ERR: Failed to open [chars].[dec] syslog file.

Explanation The system has failed to open a syslog file. This condition might have occurred because one or more subfiles have been deleted or because there is no PCMCIA disk in slot0. If one or more subfiles are missing, the subfiles will be automatically restored when the current file reaches its capacity and is archived.

Recommended Action Verify that there is a PCMCIA disk in slot0.

Error Message

%SYSLOG_SERVER-3-PARSING_ERR: Parsing file error.

Explanation The router is not configured to time-stamp all of the log messages.

Recommended Action Configure your router to time-stamp the log messages by entering the **service timestamps** command.

Error Message

%SYSLOG_SERVER-3-READ_ERR: Failed to read a file.

Explanation The system has failed to read a file.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYSLOG_SERVER-3-UNKNOWN_NAME: Unknown command or device name, or unable to find device address.

Explanation The system could not find a device address, or an unknown command or device name has been used.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYSLOG_SERVER-3-WRITE_ERR: Failed to write a syslog file.

Explanation The system has failed to write a syslog file.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

SYSMGT_RPC Messages

The following are system management error messages.

Error Message

%SYSMGT_RPC-3-IPC_ERROR: SYSMGT RPC - IPC [chars] [chars] failed ([chars])

Explanation A system management RPC operation failure has occurred. The request for information from the CIP card will not be processed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%SYSMGT_RPC-3-NETMGT_EVENT: SYSMGT RPC - NETMGT Event: [chars] ([dec])

Explanation An RPC network management event error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%SYSMGT_RPC-3-RPC_ERROR: SYSMGT RPC - RPC [chars] [chars] failed ([chars] [dec])
```

Explanation An RPC operation failure has occurred. The request for information from the CIP card will not be processed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

T1E1SUNI Messages

The following are error messages associated with the PAM port driver.

Error Message

```
%T1E1SUNI-1-NOMEMORY: Unit [dec], no memory for [chars]
```

Explanation The unit described has a memory error for the IDB structure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

TAC Messages

The following are Terminal Access Controller Access Control System (TACACS) protocol error messages.

Error Message

```
%TAC-4-NOTIMEOUT: Warning: This command has been deprecated in favor of the line-command "timeout login response"
```

Explanation This command has been phased out and should no longer be used.

Recommended Action You can use the **timeout login response** command. The **timeout login response** command now provides the required functionality.

Error Message

```
%TAC-3-PICKCTX: No pick-context
```

Explanation The context for picking the next server has disappeared.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TAC-6-SENDTMO: Send type [dec] to [IP_address] timed out

Explanation A background TACACS notification (enabled with the **tacacs notify** command) has not been acknowledged by the TACACS server processor within the 5-minute timeout period. The information contained in that notification was lost. This loss of information might interfere with accounting or auditing on the server. This condition occurs when the TACACS server is misconfigured, has crashed, or has become unreachable through the network.

Recommended Action Ensure that the TACACS server is correctly configured. Also verify that the network attached to the TACACS server is not causing this condition to occur.

Error Message

%TAC-4-SERVREF: Warning: Server [IP_address]:[dec] is still referenced by server group.

Explanation The server that is being removed is still being referenced by a server group.

Recommended Action Remove the server from the server group configuration as soon as possible.

Error Message

%TAC-3-XTACACL: [chars]: accesslist [hex] out of range for "[chars]"

Explanation The TACACS facility has created a message that contains an invalid access list (out of bounds).

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

TAGCON Messages

The following are tag distribution and control error messages.

Error Message

%TAGCON-4-ADDR_PROC: Can't create tagcon addr proc

Explanation When a new IP address for a TDP peer is added to the system, it may be necessary to update the TFIB for any routes for which the new address is a next hop. The address process determines whether it is necessary to update the TFIB. The system will regularly attempt to create the address process.

Recommended Action This is an informational message only. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TAGCON-4-ADDRQ: Can't alloc work item for [IP_address]

Explanation When a new IP address for a TDP peer is added to the system, it may be necessary to update the TFIB for any routes for which the new address is a next hop. The address process determines whether it is necessary to update the TFIB. The system will regularly attempt to queue the necessary work item.

Recommended Action This is an informational message. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TAGCON-3-ALLOC: Cannot alloc [chars]

Explanation An attempt to allocate a tag-switching data structure has failed because of a low memory condition.

Recommended Action Reduce other system activity to ease memory demands. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TAGCON-3-BUFFERBIND: unexpected error [dec]; peer [chars]; [chars]

Explanation An unexpected failure has occurred during the building of a TDP PIE for transmission to a TDP peer. This condition occurred while the system was attempting to add a tag binding or an address to the PIE.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TAGCON-3-CONSISTENCY: [chars]

Explanation An action attempted by the tag control process has encountered an unexpected condition.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TAGCON-3-DEADADJ: [IP_address]/[IP_address], [chars]

Explanation A problem has occurred in cleanup following termination of a TDP session.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TAGCON-3-DEFCASE_BINDING_PIE: Unexpected blist_type ([dec]) for [chars] PIE from peer [chars]
```

Explanation A TDP PIE that was received from a TDP peer contained an unexpected binding list type. The PIE will be ignored.

Recommended Action Disable dynamic tag switching at the chassis level by entering the **no tag-switching ip** command. Wait 15 to 20 seconds and enable dynamic tag switching using the **tag-switching ip** command. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TAGCON-3-DIRADJTREE: [IP_address]/[IP_address]; [chars]
```

Explanation An operation on the TDP directed adjacency data structure has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TAGCON-3-EVENTQ: Can't alloc work item for [chars]
```

Explanation When a process such as the TDP process must request that the tag distribution and control process take some action, a work item is queued for the tag distribution and control process. This message is generated when an attempt to queue work for the tag distribution and control process fails. The failure can occur if the system is unable to allocate memory to hold the work request or if the process has stopped processing requests on its work queue.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TAGCON-3-INIT: process cannot initialize
```

Explanation The tag distribution and control process have failed to initialize. The condition has most likely occurred because of a low memory condition.

Recommended Action Reduce other system activity to ease memory demands. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TAGCON-4-INIT_TAG_ALLOC: Failure to initialize tag allocation pool [dec]

Explanation The system has been unable to initialize the data structure that is used to support the allocation of tags for tag switching, and the system proceeds by ignoring the event. Because the system cannot allocate tags from the tag pool, the system will not advertise the tags to peers. Because the system advertises no tags, the system will not be able to receive any tagged packets or forward any tagged packets that are received.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TAGCON-3-LATREVNWRAP: Tag Local Address Table revision number wrapped

Explanation The revision number that is used to manage the advertisement of interface addresses to TDP peers has overflowed. This condition will cause faulty advertisements of interface addresses to TDP peers and faulty tag switching on those peers.

Recommended Action Reboot the system to correct the faulty interface address advertisements. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TAGCON-3-LCLTAG_ALLOC: Cannot allocate local tag

Explanation An attempt to allocate a local (incoming) tag has failed. This condition should occur only when the system has allocated all available local tags.

Recommended Action The number of tags available for allocation can be changed by entering the **tag-switching tag-range** configuration command. Consult with your Cisco technical service representative to determine whether you should use this command to increase the number of available tags.

Error Message

%TAGCON-3-NOTIMPL: peer [chars]; [chars] not implemented

Explanation A TDP peer has requested an action that is not currently implemented by the tag distribution and control subsystem. The request will be ignored.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TAGCON-3-PEERSM: TDP peer [IP_address]([chars]): [chars]
```

Explanation An operation involving the state machine for a TDP peer has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TAGCON-3-PROCESS: process not created
```

Explanation An attempt to create the tag distribution and control process has failed. This error is most likely caused by a low memory condition.

Recommended Action Reduce other system activity to ease memory demands. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TAGCON-3-RADIXTREE: TIB walk failed ([chars])
```

Explanation Some TIB maintenance operations involve a complete scan (walk) of the TIB radix tree data structure. This message is generated when a TIB walk encounters an unexpected failure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TAGCON-5-SEND: cannot queue TDP [chars] pie for [IP_address]([chars])
```

Explanation An attempt to queue a TDP PIE for transmission to a TDP peer has failed. This failure should occur only when the TDP session with the peer no longer exists. The system should recover from this condition by discarding the TDP session and establishing a new session.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TAGCON-3-SM: Unexpected event; state=[chars], event=[chars]
```

Explanation An operation on the state machine for the tag distribution and control process has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TAGCON-3-TDPID: peer [chars], TDP Id/Addr mapping problem ([chars])

Explanation The tag distribution and control process maintains a data structure used to convert between the TDP identifier for a TDP peer and the IP addresses of that peer. This message is generated when an internal inconsistency is discovered in that data structure.

Recommended Action Disable dynamic tag switching at the chassis level by entering the **no tag-switching ip** command. Wait 15 to 20 seconds, and enable dynamic tag switching by entering the **tag-switching ip** command. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TAGCON-3-TDPID_ADDR_TBL: [chars] sort bad; item [dec]

Explanation The tag distribution and control process maintains a data structure used to convert between the TDP identifier for a TDP peer and the IP addresses of that peer. This message is generated when an internal inconsistency is discovered in that data structure.

Recommended Action Disable dynamic tag switching at the chassis level by entering the **no tag-switching ip** command. Wait 15 to 20 seconds, and enable dynamic tag switching by entering the **tag-switching ip** command. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

TAGCOS Messages

The following are tag switching class of service error messages.

Error Message

%TAGCOS-3-MEMORY_EXHAUST: [chars]

Explanation Insufficient memory was available for the cos-map operation.

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

Error Message

%TAGCOS-3-PREFIX: [chars] [IP_address][IP_netmask]

Explanation Insufficient memory was available for the prefix operation.

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

TBRIDGE Messages

The following are transparent bridging error messages.

Error Message

```
%TBRIDGE-4-BAD_ENCAP: Unexpected encapsulation received on [chars] [chars]
```

Explanation The transparent bridging driver has received a packet with encapsulation that is not recognized. The packet has been discarded. This condition might indicate that a network media error has occurred or a protocol that is not supported by this version of the Cisco IOS software is being used.

Recommended Action If the dropped packets are data from a valid protocol, upgrade to a newer version of the Cisco IOS software that supports the protocol.

Error Message

```
%TBRIDGE-4-BADXMAC: XMACACCESS: Invalid extended access list [dec]
```

Explanation This condition is caused by a configuration problem. The specified extended access list either does not exist or contains an error.

Recommended Action Correct the configuration problem.

Error Message

```
%TBRIDGE-4-BTELIMITREACHED: MAC-address table size limit ([int] entries) reached
```

Explanation The total number of bridge MAC address table entries across all bridge groups has reached the maximum limit.

Recommended Action Check the bridge tables to determine the origin of the bridge MAC address table entries. Check the network configuration and ensure that the entries are correct. Use the **bridge mac-address-table limit <n>** configuration command either to increase the maximum limit or to disable limit checking.

Error Message

```
%TBRIDGE-4-GIANT: Giant received on [chars], [dec] exceeds [dec]  
DA [enet] SA [enet] [[hex]]
```

Explanation A packet was received that exceeds the expected MTU length for the receiving interface. The first four bytes of the packet that follow the source address are also provided to help diagnose the problem.

Recommended Action Use the address and packet information to trace the source of these packets. Configure the MTU at the source to conform to the standard size for the given media.

Error Message

%TBRIDGE-4-INVALIDMEDIA: [chars] received on [chars] - invalid media for transparent bridging

Explanation An attempt has been made to configure transparent bridging on an interface that does not support it.

Recommended Action Remove transparent bridging from the configuration on the specified interface.

Error Message

%TBRIDGE-4-NOVCDROP: Destination VC unknown for packet

Explanation A transparent bridged packet that is destined for an ATM interface cannot be completely addressed.

Recommended Action Clear the bridge table to force the system to relearn all the addresses.

Error Message

%TBRIDGE-4-NOVCFLOOD: No VC's configured for bridging on [chars]

Explanation An ATM interface was configured for transparent bridging without specifying the associated VCs.

Recommended Action Configure the required VCs on the specified interface.

Error Message

%TBRIDGE-4-SMF_ACTION: invalid action found for [enet] on [chars] - [hex]

Explanation A software or hardware has error occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TBRIDGE-4-VCPAKDROP: Subscriber SA [enet] moved or loop between circuits [dec] and [dec]

Explanation A subscriber-bridged packet has been dropped because of a potential circuit loop or a roaming host at the subscriber end of the network.

Recommended Action Clear the bridge table. If this error recurs, the error is not caused by a roaming host. This condition might indicate a loop between VCs at the subscriber end of the network. Take looping VCs out of service or shut down the software interface they are on while the subscriber is contacted and asked to remove the loop condition at the subscriber end of network.

TCATM Messages

The following are ATM TAG control error messages.

Error Message

```
%TCATM-3-BADINSERT: [IP_address][IP_netmask] x[hex] to [hex]
```

Explanation An attempt has been made to insert an item on a list, and an internal inconsistency has been detected.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TCATM-3-BADSTATE: [IP_address][IP_netmask] [chars] [chars]->[chars]
```

Explanation ATM tag control uses a table-driven state machine to keep track of and transition TVCs through various states. A state transition occurs when a TVC receives one of many possible events. When this error occurred, the TVC has received an event that it did not expect while in this state.

Recommended Action The system can continue, but the system might lose the TVC that generated this error. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TCATM-4-HOPCOUNT_EQUALLED: Maxhop=[dec] hopcount=[dec] for  
[IP_address][IP_netmask] on [chars]
```

Explanation A loop has been discovered in the network.

Recommended Action Check the configuration and network path for the relevant prefix.

Error Message

```
%TCATM-4-INTERFACE: Request bind interface [chars] same as output interface for  
[IP_address][IP_netmask]
```

Explanation The incoming interface of a request bind PIE is the same interface as the next hop for the prefix. This condition might be caused by a transient routing loop that has occurred during a routing protocol convergence or a permanent routing loop that was caused by a configuration error. As a result of this condition, the TVC requests to the upstream neighbor will remain in a BIND_WAIT state until this condition clears.

Recommended Action If this condition recurs, verify that the configuration and network paths for the relevant prefix are correct.

Error Message

%TCATM-4-MALFORMED_PIE: Interface [chars] malformed TDP PIE

Explanation ATM tag control has received a malformed PIE from TDP. This condition does not affect system operation.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TCATM-4-NEWVCINRANGE: VC created on [chars] in range reserved for TC-ATM (VPIs [int]-[int], VCIs [int]-[int])

Explanation A VC has been created with a VPI/VCI that is in the range configured for use by the ATM tag control. The ATM tag control will not be able to create a TVC with that VPI/VCI, and packets that are going to and coming from the corresponding address prefix will be dropped. The new VC might be on a primary interface or a subinterface.

Recommended Action Reconfigure the new VC so that it does not fall into the range reserved for ATM tag control, or reconfigure the reserved VPI/VCI range in the interface configuration to exclude the VPI/VCI of the new VC. Use the **tag-switching atm vpi** and the **tag-switching atm vci-range** commands to reconfigure the interface.

Error Message

%TCATM-4-NOTAGIP: Tag switching disabled on [chars]

Explanation Tag switching is not enabled on the specified interface. This condition will cause tag VCI requests and advertising to be rejected. This condition might also cause VCI requests that are at the upstream device to remain in a BIND_WAIT state until tag switching is reenabled on this interface.

Recommended Action Enable tag switching.

Error Message

%TCATM-3-NOTRUNNING: ATM-TAGCONTROL is not running

Explanation An attempt to request or to create a binding has failed although the ATM tag control system is not initialized. This condition is most likely caused by an incorrect configuration or a low memory condition.

Recommended Action Reduce other system activity to ease memory demands. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TCATM-3-OFFLIST: [IP_address][IP_netmask] [hex] not on list [hex]
```

Explanation An internal inconsistency has been detected during an attempt to remove an item from a list that was not on the list.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TCATM-4-OLDVCINRANGE: VC exists on [chars] in range reserved for TC-ATM (VPIs [int]-[int], VCIs [int]-[int])
```

Explanation A VC already exists with a VPI/VCI in the range configured for use by the ATM tag control. The ATM tag control will be unable to create a TVC with that VPI/VCI, and packets to or from the corresponding address prefix will be dropped. The existing VC may be on either the primary interface or a subinterface. This message is issued only once, even if there are multiple existing VCs in the reserved range.

Recommended Action Reconfigure the existing VCs so that they do not fall into the range reserved for ATM tag control, or use the **tag-switching atm vpi** and **tag-switching atm vci-range** interface configuration commands to reconfigure the reserved VPI/VCI range so that it excludes the VPI/VCIs of existing VCs.

Error Message

```
%TCATM-3-ONLIST: [IP_address][IP_netmask] [hex] on list [hex]
```

Explanation An internal inconsistency has been detected during an attempt to add an item to a list that is already on the list.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TCATM-3-PROCESS: process not created
```

Explanation An attempt to create the ATM tag control process has failed. This condition might be caused by low memory.

Recommended Action Reduce other system activity to ease memory demands. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TCATM-4-RESOURCE_LIMIT: VC resource exhausted on [chars]

Explanation The system has run out of VC resources for the specified interface. TVCs for some destination prefixes will not be established, and the result may be degraded network performance.

Recommended Action Check to ensure that the negotiated VPI range is sufficient to permit usage of the maximum number of TVCs available on the hardware. If the negotiated VPI range is sufficient, reconfigure the network so that fewer TVCs are required on this interface.

Error Message

%TCATM-3-UNEXPECTEDBIND: Interface [chars] received unexpected bind for [IP_address][IP_netmask]

Explanation An unexpected BIND has been received for a prefix. A memory resource allocation failure has prevented this peer from sending a message to the neighbor to release the BIND. The system will continue to function normally, but the downstream neighbor might be holding a binding, for which there is no matching VCI at this end.

Recommended Action Reduce other system activity to ease memory demands. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TCATM-4-XCONNECT_FAILED: [IP_address][IP_netmask] [chars] [chars] [chars]

Explanation The system has run out of resources to set up a switch cross-connect for the specified interfaces. TVCs for some destination prefixes will not be established. This condition might cause network performance to degrade.

Recommended Action Ensure that the negotiated VPI range will allow the system to use the maximum number of available TVCs. If the negotiated VPI range will support the maximum number of available TVCs, reconfigure the network so that fewer TVCs are required for this interface.

TCP Messages

The following are TCP error messages.

Error Message

%TCP-2-ACCEPT: Callback failed to accept connection from [IP_address]:[dec] to [IP_address]:[dec] -- discarding

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TCP-6-BADAUTH: [chars] MD5 digest from [IP_address]:[dec] to  
[IP_address]:[dec][chars]
```

Explanation The system has received a TCP packet with an invalid MD5 authentication digest on a connection endpoint. The message ends with the string if the incoming packet was a TCP reset packet.

Recommended Action Determine why the source of the packet is not generating correct digests on the connection. This condition could be caused by either misconfiguration or security weaknesses.

Error Message

```
%TCP-2-BADQUEUE: Multiple entry for packet [hex]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TCP-2-BADREFCNT: Tty[t-line]: Bad refcnt for packet [hex] during retransmit,  
[chars]:[dec] to [chars]:[dec], state [dec]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TCP-2-BADTCBREFCNT: Bad TCB refcount: TCB [hex], refcnt [dec]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TCP-2-BUFFER: Tty[t-line], buffering bug
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TCP-2-HALFCLOSE: Tty[t-line], tcp_putbyte() write disabled
```

Explanation TCP has received a packet from a user application after the connection was already half closed.

Recommended Action Determine which TCP application is still sending packets after the connection was half closed.

Error Message

```
%TCP-6-INTERCEPT: [chars], count ([dec]/[dec]) 1 min [dec]
```

Explanation The TCP Intercept code has changed state.

Recommended Action This message is for informational purposes, but it may indicate a security problem.

Error Message

```
%TCP-2-INVALIDTCB: Invalid TCB pointer: [hex]
```

Explanation An invalid TCB is being used.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TCP-2-INVALIDTCPENCAPS: Invalid TCB encaps pointer: [hex]
```

Explanation This message occurs when the TCP driver code accesses the TCP encaps structure, which is already freed elsewhere in the code.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TCP-6-NOBUFF: TTY[t-line], no buffer available
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TCP-3-NOTFOUND: Connection info for ([IP_address]:[dec]) => ([IP_address]:[dec])
not found.
```

Explanation The TCP Intercept code was searching its database for information for a particular connection, but this information was not found.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TCP-2-NOTREADY: [chars] called but TCP not initialized
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TCP-2-PUTBYTE: Tty[t-line], tcp_putbyte() with blocking disabled
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TCP-6-TOOBIG: Tty[t-line], too many bytes of options ([dec])
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

TDM Messages

The following are Time Division Multiplexing (TDM) error messages.

Error Message

```
%TDM-4-TDM_BAD_CONNECT: Bad connection requested: slot [dec], stream [dec],  
channel [dec] to slot [dec], stream [dec], channel [dec].
```

Explanation The TDM cross-connect request has been ignored. One of the devices either does not exist or is not configured properly for TDM.

Recommended Action Check the request for errors and ensure that the ports are configured correctly before reissuing the **tdm-group** command. Note that the *type* argument used in the **tdm-group** command applies only if the **mode cas** command has been enabled. If you are configuring **cross-connectpass-through** from UIO serial port 0 or 1 to a controller, the **encapsulation clear-channel** command must be configured on the serial port.

Error Message

```
%TDM-3-TDM_BADUNIT: Slot [dec] bad board ID [hex] detected.
```

Explanation The specified board returned an ID that was not recognized by the Cisco IOS software. This error could be caused by a hardware failure or by software that predates the hardware.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TDM-1-TDM_INITFAIL: Slot [dec] TDM init failure: stream [dec], channel [dec],  
channel register [hex], control register [hex].
```

Explanation The specified TDM port could not be initialized. The error could be caused by a hardware failure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TDM-1-TDM_MB_INITFAIL: Motherboard TDM init failure:\nstream [dec], channel  
[dec], channel register [hex], control register [hex].
```

Explanation The specified TDM port on the system motherboard could not be initialized. The error could be caused by a hardware failure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

TDM_CLOCK_SYNCHRONIZATION Messages

The following are specified Time Division Multiplexing (TDM) frame clock error messages.

Error Message

```
%TDM_CLOCK_SYNCHRONIZATION-4-TDMCLK_CHANGE: TDM frame clock source transitioned  
fromPriority [dec] [chars] [chars] to Priority [dec] [chars] [chars]
```

Explanation A change in the clock source has occurred.

Recommended Action No action is required.

Error Message

```
%TDM_CLOCK_SYNCHRONIZATION-4-TDMCLK_LOST_LOCK: TDM frame clock [chars] lost lock  
- clock source failed.
```

Explanation The clock source has failed.

Recommended Action If an alternate source is available, it will be used.

Error Message

```
%TDM_CLOCK_SYNCHRONIZATION-4-TDMCLK_STATE_CHG: TDM frame clock state change,  
state: [chars]
```

Explanation A clock state change has occurred.

Recommended Action This is a debug error message only. No action is required.

Error Message

```
%TDM_CLOCK_SYNCHRONIZATION-4-TDMCLK_STATE_ERR: TDM frame clock state error,  
state: [chars] event: [chars]
```

Explanation An invalid clock event has occurred.

Recommended Action No action is required.

TDP Messages

The following are Tag Distribution Protocol (TDP) error messages.

Error Message

```
%TDP-5-ACL: tag advertise-tags has no effect for tc-atm
```

Explanation The **tag-switching advertise-tags** configuration command has no effect for tag-controlled ATM interfaces. The purpose of the **tag-switching advertise-tags** command is to restrict the set of tags that are advertised, therefore restricting which packets are tagged. Its effect is

to cause some packets that might otherwise be tagged to be sent untagged over tag-enabled interfaces. Because untagged packets typically cannot be forwarded at acceptable performance by the ATM switches within the cloud, the access controls configured by the **tag-switching advertise-tags** command are not supported for tag-controlled ATM interfaces.

Recommended Action No action is required.

Error Message

```
%TDP-5-ACL1: tag advertise-tags has no effect for tc-atm
```

Explanation The **tag-switching advertise-tags** configuration command has no effect for tag-controlled ATM interfaces. The purpose of the **tag-switching advertise-tags** command is to restrict the set of tags that are advertised, therefore restricting which packets are tagged. Its effect is to cause some packets that might otherwise be tagged to be sent untagged over tag-enabled interfaces. Because untagged packets typically cannot be forwarded at acceptable performance by the ATM switches within the cloud, the access controls configured by the **tag-switching advertise-tags** command are not supported for tag-controlled ATM interfaces.

Recommended Action No action is required.

Error Message

```
%TDP-3-BAD_ADDRESS_LEN: peer [chars]; address len [dec]
```

Explanation A TDP PIE containing an address list type that is unexpected for the situation has been received from a peer. The system proceeds by ignoring the PIE. Ignoring the PIE may cause the system to experience impaired or faulty tag switching with the peer.

Recommended Action Disable dynamic tag switching at the chassis level by entering the **no tag ip** command, waiting 15 to 20 seconds, and then reenabling dynamic tag switching by entering the **tag ip** command. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TDP-3-BAD_METRIC_LEN: peer [chars]; metric len [dec]
```

Explanation A TDP PIE containing an address list type that is unexpected for the situation has been received from a peer. The system proceeds by ignoring the PIE. Ignoring the PIE may cause the system to experience impaired or faulty tag switching with the peer.

Recommended Action Disable dynamic tag switching at the chassis level by entering the **no tag ip** command, waiting 15 to 20 seconds, and then reenabling dynamic tag switching by entering the **tag ip** command. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TDP-3-BAD_MLIST_TYPE: peer [chars]; mlist_type [dec]; [chars] pie
```

Explanation A TDP PIE containing an unknown metric list type or one that is unexpected for the situation has been received from a peer.

Recommended Action Disable dynamic tag switching at the chassis level by entering the **no tag ip** command, waiting 15 to 20 seconds, and then reenabling dynamic tag switching by entering the **tag ip** command. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TDP-3-BAD_PIE: peer [chars]; unknown pie type [hex]
```

Explanation An unknown TDP PIE type has been received from a peer.

Recommended Action Disable dynamic tag switching at the chassis level by entering the **no tag ip** command, waiting 15 to 20 seconds, and then reenabling dynamic tag switching by entering the **tag ip** command. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TDP-3-BAD_PREFIX_LEN: peer [chars]; prefix len [dec]
```

Explanation A TDP PIE containing a destination prefix with a bad length has been received from a peer.

Recommended Action Disable dynamic tag switching at the chassis level by entering the **no tag ip** command, waiting 15 to 20 seconds, and then reenabling dynamic tag switching by entering the **tag ip** command. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TDP-3-CONSISTENCY: [chars]
```

Explanation An action attempted by the TDP has encountered an unexpected condition.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TDP-3-GENERAL: [chars]

Explanation An action attempted by the TDP implementation has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TDP-4-IDENT: cannot set chassis TDP ident

Explanation The TDP requires that each chassis have a TDP identifier. An attempt to set the TDP identifier for the chassis has failed.

Recommended Action This is an informational message. As long as it must set its chassis TDP identifier, the system will periodically attempt to do so until it succeeds. If this message occurs repeatedly, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TDP-5-INFO: [chars]

Explanation This is an informational message generated by the TDP implementation.

Recommended Action No action is required.

Error Message

%TDP-3-KA_NOMEMORY: Can't alloc KA PIE

Explanation An attempt to allocate a buffer for a TDP keepalive PIE has failed.

Recommended Action The system will continue by omitting transmission of the TDP keepalive PIE. This error may result in the termination of one or more TDP sessions as the peers time out the sessions. If this message recurs, reduce other system activity if possible, and contact your Cisco technical service representative for assistance.

Error Message

%TDP-3-MALFORMED_PIE: peer [chars]; format error for pie type [hex]

Explanation A corrupted TDP PIE has been received from a TDP peer.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TDP-4-PTCL: peer [chars], [chars]
```

Explanation A violation of the TDP by a TDP peer has been detected.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TDP-3-PTCLREAD: peer [chars], read failure
```

Explanation An error has occurred during an attempt to read a TDP PDU that was received from a peer.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TDP-3-SM: unexpected event: peer [IP_address]([chars]), state=[chars],  
event=[chars][chars]
```

Explanation An operation on the state machine for a TDP peer has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TDP-3-TAGATM_BAD_RANGE: Interface [chars], Bad VPI range. Can't start a TDP  
session
```

Explanation The VPI range exchanged between the TDP peers is nonoverlapping.

Recommended Action The system will not be able to create a TDP session between the affected TDP peers. Reissue the **tag-switching vpi** command on the appropriate interface with the correct VPI range.

Error Message

```
%TDP-3-TAGATM_NOMEM: Interface [chars], Resource failure. Can't start a TDP  
session
```

Explanation An attempt to allocate a buffer for the TDP TAGATM VPI or VCI ranges has failed.

Recommended Action The system will not be able to create a TDP session between the affected TDP peers. If this message recurs, reduce other system activity if possible, and contact your Cisco technical service representative for assistance.

Error Message

```
%TDP-3-UNEXPECTED_ALIST_TYPE: peer [chars]; alist_type [dec]; [chars] pie
```

Explanation A TDP PIE containing an address list type that is unexpected for the situation has been received from a peer. The system proceeds by ignoring the PIE. Ignoring the PIE may cause the system to experience impaired or faulty tag switching with the peer.

Recommended Action Disable dynamic tag switching at the chassis level by entering the **no tag ip** command, waiting 15 to 20 seconds, and then reenabling dynamic tag switching by entering the **tag ip** command. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TDP-3-UNEXPECTED_BLIST_TYPE: peer [chars]; blist_type [dec]; [chars] pie
```

Explanation A TDP PIE containing an address list type that is unexpected for the situation has been received from a peer. The system proceeds by ignoring the PIE. Ignoring the PIE may cause the system to experience impaired or faulty tag switching with the peer.

Recommended Action Disable dynamic tag switching at the chassis level by entering the **no tag ip** command, waiting 15 to 20 seconds, and then reenabling dynamic tag switching by entering the **tag ip** command. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TDP-3-UNEXPECTED_PIE: peer [chars]; unexpected pie type [hex]
```

Explanation A TDP PIE containing an address list type that is unexpected for the situation has been received from a peer. The system proceeds by ignoring the PIE. Ignoring the PIE may cause the system to experience impaired or faulty tag switching with the peer.

Recommended Action Disable dynamic tag switching at the chassis level by entering the **no tag ip** command, waiting 15 to 20 seconds, and then reenabling dynamic tag switching by entering the **tag ip** command. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TDP-3-UNKNOWN_ALIST_TYPE: peer [chars]; alist_type [dec]; [chars] pie
```

Explanation A TDP PIE containing an address list type that is unexpected for the situation has been received from a peer. The system proceeds by ignoring the PIE. Ignoring the PIE may cause the system to experience impaired or faulty tag switching with the peer.

Recommended Action Disable dynamic tag switching at the chassis level by entering the **no tag ip** command, waiting 15 to 20 seconds, and then reenabling dynamic tag switching by entering the **tag ip** command. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TDP-3-UNKNOWN_BLIST_TYPE: peer [chars]; blist_type [dec]; [chars] pie
```

Explanation A TDP PIE containing an address list type that is unexpected for the situation has been received from a peer. The system proceeds by ignoring the PIE. Ignoring the PIE may cause the system to experience impaired or faulty tag switching with the peer.

Recommended Action Disable dynamic tag switching at the chassis level by entering the **no tag ip** command, waiting 15 to 20 seconds, and then reenabling dynamic tag switching by entering the **tag ip** command. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

TESTPA Messages

The following are TestPA port adapter error messages.

Error Message

```
%TESTPA-3-DMAERROR: bay [[dec]] dma error: [chars]
```

Explanation A DMA failure has occurred.

Recommended Action Ensure that the port adapter is properly seated in the bay.

Error Message

```
%TESTPA-3-INITFAIL: bay [[dec]] initialization failed: [chars]
```

Explanation The TestPA port adapter driver has failed to successfully initialize the hardware on the TestPA port adapter. The port adapter will be deactivated.

Recommended Action Ensure that the port adapter is properly seated in the bay.

Error Message

```
%TESTPA-3-NOTANALYZED: bay [[dec]] analyze failed
```

Explanation The TestPA port adapter driver has failed to successfully complete the necessary tasks for initial bringup of the port adapter. This error is usually caused by a shortage of memory. Previous messages in the log will indicate the exact reason for the failure. The port adapter will be deactivated.

Recommended Action Ensure that the port adapter is properly seated in the bay.

Error Message

```
%TESTPA-3-POWEREDOFF: bay [[dec]] powered off
```

Explanation The port adapter has been powered off. Other messages in the log will report the cause of this event.

Recommended Action If possible, correct any errors indicated by the other messages occurring at the time of this message. If this message persists, ensure that the port adapter is properly seated in the bay.

TFIB Messages

The following are Tag Forwarding Information Base (TFIB) error messages.

Error Message

```
%TFIB-2-BADENCAPLEN: Invalid encaps length [dec], tag size [dec], at incoming tag [chars]
```

Explanation An unexpected operation on a TFIB entry for a recursive route has occurred, or an adjacency has an invalid MAC rewrite string. The system proceeds by not creating or updating a TFIB entry for this route. Packets that are tagged for this destination will be dropped or stripped of their tags.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TFIB-5-CLEAR_COUNTERS: Clear tagswitch forwarding counters by [chars]
```

Explanation The tagswitch forwarding counters have been cleared.

Recommended Action No action is required.

Error Message

```
%TFIB-2-CONSISTENCY: [chars]: [chars] [chars] [chars]
```

Explanation The MPLS TFIB implementation has encountered an unexpected condition.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TFIB-4-FIBCBK: Missing MPLS Forwarding Information Base table for tableid [dec]  
during [chars] event
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TFIB-7-INVALIDINDEX: Invalid index [dec] passed to TFIB for  
[IP_address][IP_netmask], CEF entry has [dec] paths
```

Explanation The system has detected an invalid index while performing an action on the TFIB. The system proceeds by not creating or updating a TFIB entry for this route. Packets that are tagged for this destination will be dropped or stripped of their tags.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TFIB-2-INVALIDLIST: Invalid circular list for tags [chars] [chars]
```

Explanation The circular list of tag rewrites for the specified incoming tag has been corrupted. The system will proceed, but the list remains corrupted.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TFIB-7-INVALIDTAG: Invalid tag [chars] [chars]
```

Explanation An invalid tag was seen while performing an operation on the TFIB.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TFIB-2-MEMORY: No memory for [chars]

Explanation An operation on the TFIB has failed because of insufficient free memory.

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

Error Message

%TFIB-7-NONDB: Null ndb value passed to TFIB [chars]

Explanation An unexpected operation on the TFIB has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TFIB-7-NOPATH: No fib_path at index [dec] for [IP_address][IP_netmask]

Explanation An unexpected operation on the TFIB has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TFIB-7-NULLFIB: Programming error: NULL cef entry pointer passed to tfib code

Explanation An unexpected operation on the TFIB has occurred. The system proceeds by omitting the tag operation. This error may cause packets tagged for this destination to exhibit impaired or faulty behavior.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TFIB-7-NULLPATH: NULL fib path value passed to TFIB

Explanation An unexpected operation on the TFIB has occurred. The system proceeds by omitting the tag operation. This error may cause packets tagged for this destination to exhibit impaired or faulty behavior.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TFIB-7-NULLREWRITE: NULL tag rewrite pointer value passed to TFIB for deletion

Explanation An unexpected operation on the TFIB has occurred. The system proceeds by omitting the tag operation. This error may cause packets tagged for this destination to exhibit impaired or faulty behavior.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TFIB-7-RESOLUTION: Temporarily unable to resolve TFIB loadinfo entry [dec] for [IP_address][IP_netmask], fib has [dec] paths

Explanation A temporary difference has occurred between the CEF database and the TFIB. This difference will be resolved later.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TFIB-7-SCANSABORTED: TFIB scan not completing. [chars] [chars]

Explanation The periodic TFIB scan is being repeatedly aborted because of a problem such as an unresolved adjacency.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

TI1570 Messages

The following are PCI/TI1570-based ATM port adapter error messages.

Error Message

%TI1570-5-BADVCSETUP: ti1570_vc_setup failed. (vci [dec] of the last vpi [dec] exceeds (vc-per-vp - 3)).

Explanation The TI1570 chip reserves three RX DMA channels for OAM cells. As a result, the last three VCIs of the last VPI block cannot be used for regular traffic.

Recommended Action Avoid trying combinations of different VCIs and VPIs.

Error Message

%TI1570-3-BLOCKCMDFAIL: [chars] block command (code [dec]) failed, error code [dec]

Explanation An internal hardware or software error has occurred.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TI1570-1-DEVICEINITFAIL: PCI configuration for [chars] in slot [dec]

Explanation The ATM port adapter has failed to complete hardware initialization. This error should not be a recurring condition.

Recommended Action Reset the adapter. If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TI1570-3-DISCOVER: Found [dec] out of [dec] devices (ID [hex]) in bay [dec]

Explanation The ATM-PCI port adapter software driver found fewer devices than it was configured to expect. This error could indicate that the missing devices have failed.

Recommended Action Power down, reseal the card, and reboot. If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TI1570-3-FAILSETUPVC: Interface [chars], Failed to setup vc [dec] (Cause: [chars])

Explanation This error probably indicates a hardware failure in the ATM-PCI port adapter.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TI1570-3-FAILTEARDOWNVC: Interface [chars], Failed to down vc [dec] (Cause: [chars])

Explanation An ATM VC could not be shut down for the reason shown in the error message string. An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TI1570-7-FRAMERINT: TI1500 framer interrupt isr1 [hex], isr2 [hex], isr3 [hex]

Explanation The ATM-PCI port adapter driver has received and handled a framer interrupt.

Recommended Action No action is required.

Error Message

%TI1570-1-IDBINITFAIL: [chars] for subunit [dec] in bay [dec]

Explanation The ATM port adapter has failed to complete hardware initialization. This error should not be a recurring condition.

Recommended Action Reset the adapter. If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TI1570-1-INITFAIL: [chars] [chars]

Explanation The ATM port adapter has failed to complete hardware initialization. Details of the failure are shown in the error message.

Recommended Action Reset the adapter. This should not be a recurring condition. If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TI1570-1-INVALIDCONFIG: VIP only supports one PA-A1 ATM LITE PA. The other PA bay must be emptied in order for the PA-A1 ATM LITE PA to function.

Explanation The bandwidth requirements of the installed port adapters exceed the rated capability of the processor.

Recommended Action Remove one of the port adapters or upgrade the VIP.

Error Message

```
%TI1570-3-NOPCIMB: TI1570 unit [dec]: PCI mini buffer unavailable.
```

Explanation An internal hardware or software error has occurred.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TI1570-3-NOPCIMEMORY: TI1570 unit [dec]: PCI memory unavailable.
```

Explanation The system has experienced PCI memory exhaustion. This condition is probably caused by heavy traffic congestion but could also be caused by an internal software error.

Recommended Action Review the configuration for performance bottlenecks. If this error message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TI1570-3-NOSYSTEMMEMORY: TI1570 unit [dec]: SYSTEM memory unavailable.
```

Explanation Memory exhaustion has occurred in the ATM-PCI port adapter driver.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TI1570-3-NOTTI1570: Bay [dec] device ID seen as [hex], expected [hex]
```

Explanation The ATM-PCI port adapter driver could not recognize the interface chips.

Recommended Action Power down, reseal the interface card, and reboot. If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TI1570-3-NOTXDESCSPACE: [chars] No tx buffer descriptor space in particle, data block [hex], data start [hex]
```

Explanation Memory could not be allocated by the driver for a packet. This error indicates memory exhaustion.

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

Error Message

%TI1570-1-PCIMEMNOTENOUGH: Only [hex] bytes of memory available for [chars]

Explanation The port adapter requires more PCI memory. The installed amount is less than what is required by the drivers for packet buffers.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TI1570-3-PCI_PERROR: TI1570 unit [dec]: PCI parity error ([hex])

Explanation A parity error has occurred on the PCI bus. This error probably indicates an existing or developing hardware failure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TI1570-3-PLXNOTFOUND: Bay [dec] device ID seen as [hex], expected #[hex]

Explanation The ATM-PCI port adapter driver has found invalid device IDs on the specified card. This error could indicate a hardware failure, or it may signify that the Cisco IOS software must be upgraded to recognize newer hardware.

Recommended Action Power down, reseal the interface card, and reboot. Find out if newer software is required for your hardware. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TI1570-3-RBDCORRUPT: TI1570: received corrupted shadow particle pointer

Explanation The ATM-PCI port adapter driver has experienced an internal error that was caused by a software or hardware failure.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TI1570-3-RXDMANOTINACT: RX DMA entry [hex] not going inactive

Explanation A DMA channel has failed to deactivate during the shutdown of a VC. This failure error could indicate either a hardware or a software failure.

Recommended Action Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TI1570-3-RXFREEZE: [chars] receive freeze [dec]

Explanation This message indicates that excessive traffic congestion on the ATM interface may have resulted in cell loss. The cell buffers of the PCI-ATM interface were full when a cell arrived on the interface, resulting in a receive freeze condition. A small number of freezes might not be a cause for concern.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TI1570-3-RX_HALT: TI1570 unit [dec]: Receive Channel Halt

Explanation A hardware failure involving the ATM-PCI port adapter has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TI1570-3-TXDATANOTALIGNED: [chars] tx buffer data start not aligned to 32 bit boundary, data block[hex], data start [hex]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TI1570-3-TXDMANOTFLUSHED: TX DMA not flushed

Explanation A transmit DMA channel failed to flush its buffers during the shutdown of an ATM interface. This failure error could indicate either a hardware or a software failure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TI1570-3-TXFREEZE: [chars] transmit freeze [dec]

Explanation The PCI-ATM interface had to stop the transmitter while waiting for data. A small number of freezes might not be a cause for concern.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TI1570-3-UNSUPPORTED: Interface [chars], [chars] not supported

Explanation An attempt was made to configure a rate queue on an ATM Lite port adapter that does not support rate queues.

Recommended Action Check the configuration and try again, avoiding unsupported features.

TIB Messages

The following are Tag Information Base (TIB) error messages.

Error Message

%TIB-3-GENERAL: [chars]

Explanation An action attempted by the TIB implementation has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TIB-3-INIT: Cannot allocate TIB

Explanation During initialization for tag switching, an attempt to initialize the TIB failed. This error may be caused by insufficient memory.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TIB-3-LCLTAG: [IP_address]/[IP_address], [chars]; unexpected tag state=[dec]

Explanation An operation on the TIB involving a locally assigned (incoming) tag has failed. The system proceeds by omitting the tag operation. This error may cause packets tagged for this destination to exhibit impaired or faulty behavior.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TIB-3-RADIXTREE: [IP_address]/[IP_address]; [chars]

Explanation An operation on the TIB data structure has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TIB-3-REMOTETAG: [IP_address]/[IP_address], peer [chars]; tag [dec]; [chars]

Explanation An operation on the TIB involving a tag assigned by a TDP peer has failed. The system proceeds by omitting the tag operation. This error may cause packets tagged for this destination to exhibit impaired or faulty behavior.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TIB-3-SM: Unexpected event; state=[chars], event=[chars]

Explanation An operation on the TIB state machine has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TIB-3-TIBREVNUMWRAP: TIB revision number wrapped; toggling dynamic tag switching off and on to recover.

Explanation The TIB revision number used to manage advertisement of tags to TDP peers has overflowed. This error will result in tag distribution to TDP peers. The system recovers by toggling dynamic tag switching off and on, forcing the revision number to be reinitialized.

Recommended Action No action is required.

TIGER Messages

The following are error-correcting code (ECC) and parity-related error messages.

Error Message

%TIGER-3-BADADDR_MBE: Invalid MBE dram address: [hex] latched by Tiger

Explanation The address latched by the Tiger when detecting an MBE is not a valid DRAM address. The Tiger should not report this kind of error under its normal operating conditions. This error probably indicates that a malfunctioning Tiger needs to be replaced.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TIGER-3-BADADDR_MBE_RMW: Invalid MBE dram address: [hex] latched by Tiger during a RMW cycle

Explanation The address latched by the Tiger when detecting an MBE during a read-modify-write cycle is not a valid DRAM address. The Tiger should not report this kind of error under its normal operating conditions. This error probably indicates that a malfunctioning Tiger needs to be replaced.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TIGER-3-BADADDR_SBE: Invalid SBE dram address: [hex] latched by Tiger

Explanation The address latched by the Tiger when detecting a SBE is not a valid DRAM address. The Tiger should not report this kind of error under its normal operating conditions. This error probably indicates that a malfunctioning Tiger needs to be replaced.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TIGER-3-BADADDR_SBE_RMW: Invalid SBE dram address: [hex] latched by Tiger during a RMW cycle

Explanation The address latched by the Tiger when detecting a SBE is not a valid DRAM address. The Tiger should not report this kind of error under its normal operating conditions. This error probably indicates that a malfunctioning Tiger needs to be replaced.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TIGER-2-MALLOC: Attempt to malloc [dec] bytes for the ECC error log failed. ECC errors will only be reported and not recorded.

Explanation Memory allocation for the ECC error log has failed.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TIGER-2-MBE: Multiple bit error detected at [hex]

Explanation A multibit uncorrectable error has been detected on a CPU read from DRAM.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TIGER-2-MBE_RMW: Multiple bit error detected at [hex] on a read-modify-write cycle

Explanation A multibit uncorrectable error has been detected during a read-modify-write cycle on a CPU read from DRAM for a non-8-byte access.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TIGER-2-PARITY: Parity error on CPU write to address: [hex]
```

Explanation A parity error was detected by the Tiger during a CPU write operation.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TIGER-2-PARITY_INFO: Parity error was detected on the  
following byte(s) of a double word: [chars] [chars] [chars]
```

Explanation This error message indicates which bytes of a 64-bit word had bad parity that caused the Tiger to generate an interrupt.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TIGER-3-SBE: Single bit error detected and corrected at [hex]
```

Explanation A single-bit correctable error was detected on a read from the DRAM. To dump the single-bit errors that have been logged up to this point, enter the **show ecc** command.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TIGER-3-SBE_HARD: Single bit *hard* error detected at [hex]
```

Explanation A single-bit uncorrectable error (hard error) was detected on a CPU read from DRAM.

Recommended Action Enter the **show ecc** command to dump the single-bit errors that have been logged up to this point and to confirm the address locations for the detected hard errors. If this error recurs, replace the DRAM.

Error Message

```
%TIGER-3-SBE_LIMIT: Single bit error detected and corrected at [hex]
```

Explanation A single-bit correctable error was detected on a CPU read from the DRAM.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TIGER-3-SBE_RMW: Single bit error detected and corrected at [hex] on a read-modify-write cycle

Explanation A single-bit correctable error was detected and corrected during a read-modify-write cycle on a CPU read from the DRAM.

Recommended Action If possible, enter the **show ecc** command to dump the single-bit errors that have been logged up to this point. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TIGER-3-SBE_RMW_LIMIT: Single bit error detected and corrected at [hex] on a read-modify-write cycle

Explanation A single-bit correctable error was detected and corrected.

Recommended Action If possible, enter the **show ecc** command to dump the single-bit errors that have been logged up to this point. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TIGER-3-SYNDROME_MBE: 8-bit Syndrome for the detected Multi-bit error: [hex]

Explanation This message provides the 8-bit syndrome for detected multibit errors. This value does not indicate the exact positions of the bits in error but can be used to approximate their positions.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TIGER-3-SYNDROME_SBE: 8-bit Syndrome for the detected Single-bit error: [hex]

Explanation This message provides the 8-bit syndrome for detected single-bit errors. This value does not indicate the exact positions of the bits in error but can be used to approximate their positions.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TIGER-3-SYNDROME_SBE_LIMIT: 8-bit Syndrome for the detected Single-bit error:  
[hex]
```

Explanation This message provides the 8-bit syndrome for detected single-bit errors. This value does not indicate the exact positions of the bits in error but can be used to approximate their positions.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

TLV Messages

The following are EEPROM error messages.

Error Message

```
%TLV-3-GET: Reading data type [dec]
```

Explanation An expected field in the EEPROM buffer was either missing or malformed.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TLV-3-UPDATE: Unable to write type [dec]
```

Explanation An attempt to update an EEPROM entry has failed.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

TMQ Messages

The following are inbound terminal port queuing (TMQ) error messages.

Error Message

```
%TMQ-3-NOTFOUND: TMQ, Attempt to delete entry not in queue
```

Explanation An attempt was made to delete an entry that was not in the queue.

Recommended Action No action is required.

TN Messages

The following are Telnet error messages.

Error Message

`%TN-2-BADLOGIN: Bad login string pointer [hex]`

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%TN-3-BADSTATE: Illegal state [dec]`

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%TN-3-READLINE: Unknown return code [dec] from telnet_readline()`

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

TN3270 Messages

The following are TN3270 error messages that are related to the TN3270 protocol, a variation of the IBM VT protocol.

Error Message

`%TN3270-2-INP_OVF1: Input Buffer overflow`

Explanation A problem in relating to the TN3270 protocol has occurred. Data without a TN3270 end-of-packet indicator was received, causing the TN3270 buffer to overflow.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

TR Messages

The following are Token Ring error messages.

Error Message

```
%TR-3-ADPCHK: Interface [chars], adapter check error (non-fatal)([hex] [hex] [hex] [hex])
```

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

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

Error Message

```
%TR-3-ADPCHKFATAL: Interface [chars], adapter check error (fatal) ([hex] [hex] [hex] [hex])
```

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

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

Error Message

```
%TR-3-BADBRDGPARMS: Unit [dec], bad bridge parameters: bridge_num=[dec], max_rd=[dec] thisring=[dec], targetring=[dec]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TR-3-BADBUFFSIZE: Unit [dec], bad buffersize = [dec]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TR-3-BADFIRM: Unit [dec], Tokenring firmware download failed got [hex], expected [hex], at address [hex].[hex]
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%TR-3-BADFIRMTYPE: Unit [dec], bad firmware type code during [chars]. type=[hex], fw=[hex]
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%TR-3-BADFUNC: Unit [dec], bad functional address=[hex], ring mode=[hex]
```

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TR-3-BADMUL: [chars]: Can't set address to a multicast ([enet])
```

Explanation An attempt was made to set the Token Ring interface MAC address to a reserved multicast address.

Recommended Action Check your configuration. Ensure that your XNS or Novell IPX Token Ring addresses have not inadvertently been set to reserved multicast addresses.

Error Message

```
%TR-3-BADRINGNUM: Unit [dec], ring number ([dec]) doesn't match established number ([dec]).
```

Explanation The number you have configured for the local Token Ring does not match the value currently in use on the ring.

Recommended Action Check the configuration to ensure that you used the correct Token Ring number. If it is correct, confirm the configuration of all other bridges on the ring to ensure that they are using the same ring number.

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, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation This error message pertains only to the Cisco IGS series routers. 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, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TR-3-DIAGFAIL: Interface [chars] failed init diags ([hex]), [chars]
```

Explanation The microcode has attempted to run its diagnostics on the chip and has failed.

Recommended Action Issue a **clear interface** command. If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

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 on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%TR-3-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 on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%TR-3-MODEFAIL: Unit [dec], change mode failed. result code=[hex], error code=[hex]
```

Explanation An internal hardware or software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%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 on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%TR-2-NOMEMORY: Unit [dec], no memory for [chars]
```

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

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

Error Message

%TR-3-OPENFAIL: Unit [dec], open failed: [chars], [chars]

Explanation The Token Ring interface was unable to insert itself into a Token Ring that is either busy or broken. The first character string in this error message indicates the stage of initialization at which the error has occurred, and the second provides information about the error.

Recommended Action To open the interface again, enter **clear interface tokenring** command. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TR-3-OPENFAIL2: Unit [dec], open failed: check the lobe cable DB-9 connection.

Explanation The Token Ring interface was unable to insert itself into the Token Ring because of an error involving a wiring problem.

Recommended Action Check the cable connecting the router to the Token Ring MAU and try to open the interface again by entering the **clear interface tokenring** command. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TR-2-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 exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TR-2-PANICINF: Unit [dec], PI [hex] [hex] [hex] [hex] [hex] [hex]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%TR-2-PANICTYPE: Unit [dec], [chars] error

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

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, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TR-3-SETBRIDGEFAIL: Unit [dec], set bridge failed (code [hex]).

Explanation A hardware error has occurred. The SRA chip on the Token Ring card could not be initialized.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%TR-3-SETFUNFAIL: Unit [dec], set functional address failed (code [hex]).

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TR-6-STATE: [chars]: Ring Status: [chars]
```

Explanation This message is displayed when the chipset reports a status change for the Token Ring. This information also is used to determine automatically whether the interface is still available for propagating network traffic.

Recommended Action No action is required.

Error Message

```
%TR-6-STATRING: TR[dec]: Ring Status: [chars] [chars]
```

Explanation This message is displayed when the chipset reports a status change for the Token Ring. This information also is used to determine automatically whether the interface is still usable to propagate network traffic. [Table 4](#) shows the meaning of each status code.

Table 4 Token Ring Status Codes

| Code | Explanation | Fatal |
|--------|-------------|-------|
| 0x8000 | Signal | Yes |
| 0x4000 | Hard error | Yes |

Recommended Action Check the Token Ring for the indicated condition.

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 that connects the router to the Token Ring MAU.

TRUNK Messages

The following are E1/T1 trunk card error messages.

Error Message

```
%TRUNK-3-BADCARDTYPE: Unknown type [hex] in shelf [dec] slot [dec]
```

Explanation The card in the specified slot and shelf was not recognized as either a T1 or E1 interface. This error indicates either a hardware or a software failure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TRUNK-3-BADCLOCK: selected clock on slot [dec] port [dec] is bad.Accepting the config.

Explanation The clock status as reported by the framer is invalid. Either no cable is plugged in or the port is defective. The configuration is accepted, and as soon as the corresponding port becomes valid, it will be applied.

Recommended Action If you are configuring the clocks while there is no card in the corresponding slot (or the cable is not plugged in yet), no action is required. Otherwise, choose another clock.

Error Message

%TRUNK-3-BADFW: Invalid framer firmware code file.

Explanation The software has detected an invalid framer firmware image that cannot be downloaded.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TRUNK-3-BADMSG: Bad doorbell message type to framer: [dec]

Explanation An invalid or undefined message type has been sent to the framer processor.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TRUNK-3-BADSLLOT: Invalid value ([dec]) for shelf [dec]; exceeds [dec]

Explanation An internal software error has occurred. An attempt has been made to reference a shelf number that is larger than the installed maximum configuration.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TRUNK-3-HBEAT: No longer receiving heartbeats from framer CPU.

Explanation Communication from the framer processor to the trunk card processor has stopped. The framer processor is no longer passing status to the trunk card processor or accepting messages from the trunk card processor.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TRUNK-3-INITFAIL: Trunk card initialization failed due to: [chars]
```

Explanation Trunk card initialization has failed for the reason that is reported within the error message string.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TRUNK-3-MSGTMOUT: Timed out waiting for framer CPU to respond.
```

Explanation The framer processor did not reply to the read request during a specified amount of time.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TRUNK-3-NOMEM: Insufficient memory for slot: [dec] in shelf: [dec]
```

Explanation Router memory was exhausted while allocating memory for use with the specified slot and shelf.

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

Error Message

```
%TRUNK-3-NOMSGS: Cannot send message to framer; no more messages available
```

Explanation The memory buffer for message passing between the trunk card and the framer processors has been exhausted. Either the messages are not being picked up or they are being generated too quickly.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

TRUNK_CLOCK Messages

The following are Cisco AS5400 clocking error messages.

Error Message

`%TRUNK_CLOCK-6-BAD_CLOCKS: There are no good clocks in the system. Remain in HOLDOVER mode`

Explanation The clock selection algorithm has failed to select any clock as the TDM primary clock.

Recommended Action No action is required.

Error Message

`%TRUNK_CLOCK-6-EXTERNAL: Switching to the user configured external clock on motherboard`

Explanation The TDM primary clock is switching from the default clock to the user-configured external clock in the motherboard.

Recommended Action No action is required.

Error Message

`%TRUNK_CLOCK-6-FREERUN: Switching to the user configured freerunning clock on motherboard`

Explanation The TDM primary clock is switching from the default clock to the user-configured free-running clock in the motherboard.

Recommended Action No action is required.

Error Message

`%TRUNK_CLOCK-3-NOMEMORY: Failed to allocate memory for the clocks`

Explanation The clock switching software has failed to allocate memory while adding a clock.

Recommended Action No action is required.

Error Message

`%TRUNK_CLOCK-6-SWITCH: Switching to the clock on slot [dec] port [dec] priority [dec] as the current primary has gone bad`

Explanation The TDM primary clock has switched to a backup clock that is coming in through the specified trunk because the current primary clock has failed.

Recommended Action No action is required.

Error Message

```
%TRUNK_CLOCK-6-TRUNK: Switching to the user configured trunk clock on slot [dec]
port [dec] priority [dec]
```

Explanation The TDM primary clock is switching from the default clock to the user-configured trunk clock.

Recommended Action No action is required.

TRUNK_DFC Messages

The following are trunk dial feature card error messages.

Error Message

```
%TRUNK_DFC-3-CONTRCREATE: Failed to create controller for [dec]/[dec]
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TRUNK_DFC-3-DSX3CONTEXT: Failed to create context for dsx3 controller in
[dec]/[dec]
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TRUNK_DFC-3-SDRAM_TEST_FAILED: Trunk DFC in slot [dec]: SDRAM failed
[[hex]..[hex]]
```

Explanation The trunk DFC SDRAM test has failed, indicating a failed memory location.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%TRUNK_DFC-3-TRUNK_FIRMWARE_DOWNLOAD_FAILED: Could not download trunk firmware in slot [dec]

Explanation The trunk firmware cannot be downloaded.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%TRUNK_DFC-3-TRUNK_FIRMWARE_NOT_READY: Trunk DFC firmware in slot [dec] is not ready

Explanation The trunk DFC firmware has failed to start.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%TRUNK_DFC-3-TRUNK_RESET_FAILED: Reset failed for Trunk DFC ROM in slot [dec]

Explanation The trunk DFC cannot be taken out of reset mode.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%TRUNK_DFC-3-TRUNK_ROM_FAILED: Trunk DFC ROM in slot [dec] failed: [chars]

Explanation The trunk DFC ROM has failed to boot properly.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%TRUNK_DFC-3-TRUNK_SLOT_CREATE: Failed to create trunk slot instance for slot [dec]
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

TSP Messages

The following are TSP error messages.

Error Message

```
%TSP-3-CAPABILITYMISMATCH: voice port [chars]: call connection id [[hex] [hex] [hex] [hex]]
```

Explanation There was a capabilities mismatch between the two call legs. The capabilities are negotiated between the call legs for CODEC, VAD, and FAX rate.

Recommended Action Ensure that the dial peer configuration is appropriate for the interface in question. Also check that the configuration on the interface is correct.

Error Message

```
%TSP-3-DSPALARM: voice port [chars]: status=[hex] message=[hex]
```

Explanation The DSP has reported a fatal error. All calls on the DSP were dropped, and a DSP reload was attempted.

Recommended Action Verify that the DSP has reloaded properly by attempting to place a call on the affected voice port. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TSP-3-FSM_ERROR: [chars]
```

Explanation An internal finite state machine error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TSP-3-NOEVENT: no free event structure available from [chars] for DSP message

Explanation There were no event structures remaining in the system pools to alert the router to a voice or signaling event.

Recommended Action Ensure that the voice port for which the event was reported is still operational. If not, clear the voice port.

Error Message

%TSP-5-PRI: [chars] at slot [dec], unit [dec], channel [dec]

Explanation A PRI signaling channel has been added to or deleted from the TSP inventory of signaling channels.

Recommended Action No action is required.

TTY Messages

The following are tty-related error messages for all platforms.

Error Message

%TTY-3-AUTOCONFIG: TTY[t-line]: Modem auto-configuration failed

Explanation Modem autoconfiguration has failed either because the modem rejected the configuration string or because of a timeout.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TTY-3-NOPROCESS: Cannot create [chars] process

Explanation An attempt to create the specified process has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

TTYDRIVER Messages

The following are router shelf asynchronous driver error messages.

Error Message

```
%TTYDRIVER-3-BADENCAP: Unknown encapsulation on interface [chars]
```

Explanation A software error has caused an unknown encapsulation type to appear on the interface specified by the error message.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TTYDRIVER-2-NOBRKPAK: Unable to allocate break block from I/O mem
```

Explanation The router does not have enough I/O memory available for buffers.

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

Error Message

```
%TTYDRIVER-2-NOBUF: Unable to allocate [dec] I/O buffers
```

Explanation A buffer memory shortage existed at the time that the configuration command was issued. This condition is temporary.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%TTYDRIVER-2-NOBUFPOOL_ASYNC: Unable to create buffer pool for async. mode  
interface
```

Explanation There is not enough memory for a per-channel control block of the asynchronous tty driver.

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

Error Message

%TTYDRIVER-2-NOMEM: Unable to allocate [dec] byte status block

Explanation The asynchronous tty driver was unable to create an internal structure 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

%TTYDRIVER-3-NOPARTS: No particles available to set up for output on tty [chars]

Explanation A software error has occurred, resulting in an unexpected exhaustion of the pool of data buffers used by the modem drivers.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TTYDRIVER-3-NOTXPART: Non-zero outcount but no transmit particle on tty [chars]

Explanation A software error has occurred, leaving a software structure in an unexpected state.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TTYDRIVER-3-RTSLOW: RTS is incorrectly deasserted for tty [chars]; reasserting now

Explanation A software error has occurred, resulting in an invalid state for the RTS modem signal.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%TTYDRIVER-3-UNKNOWN_PORT_ARCH_TYPE: Unknown port type ([dec])

Explanation An unrecognized port type has caused a software error to occur.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

TUN Messages

The following are tunnel error messages.

Error Message

```
%TUN-5-RECURDOWN: [chars] temporarily disabled due to recursive routing
```

Explanation When you are routing a 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 condition is usually caused by a misconfiguration of the tunnel or a temporary instability caused by 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 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 is required.

TXCONN Messages

The following are Cisco Transaction Connection (CTRC) error messages.

Error Message

```
%TXCONN-3-BADLICENSEKEY: Bad license key configured for Transaction Connection.
```

Explanation The license key configured with the **txconn license** configuration command is not valid.

Recommended Action Ensure that the license key was entered correctly in the **txconn license** configuration command. Refer to the CTRC documentation for information on how to obtain a valid license key.

Error Message

```
%TXCONN-3-BADMODE: Unknown mode '[chars]' configured for server [chars]
```

Explanation The mode configured for the CTRC server was rejected by the remote database server.

Recommended Action Contact your SNA network administrator to determine the correct name of the mode to use to connect to DB2 on the remote database server.

Error Message

%TXCONN-3-BADRLU: Bad remote LU '[chars]' configured for server [chars]

Explanation The remote LU configured for the CTRC server is incorrect.

Recommended Action Contact your SNA network administrator to determine the correct name of the remote LU for DB2 on the remote database server. Ensure that both the SNA network name and the LU name are correct.

Error Message

%TXCONN-5-CONNIDLETIMEOUT: Client [IP_address] connected to server [chars] has timed out after [time-stamp].

Explanation The client was idle for too long, and the idle timeout configured for the CTRC server has expired.

Recommended Action No action is required.

Error Message

%TXCONN-3-INVALIDTRANS: Bad Transaction ID, flushing out request for client [IP_address] connected server [chars], killing connection.

Explanation An invalid input stream has been detected and ignored.

Recommended Action No action is required.

Error Message

%TXCONN-3-NOSESSION: Out of resource, cannot create transaction for client [IP_address] connected server [chars], killing connection.

Explanation The router is out of memory.

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

Error Message

%TXCONN-5-SECFAIL: APPC security failed, client [IP_address] using userid '[chars]' for server [chars]

Explanation The user ID or password issued by the client was rejected by the remote database server.

Recommended Action No action is required.

Error Message

%TXCONN-5-TARGETDOWN: CICS server [chars] has become unavailable. Recovery is in progress.

Explanation A CICS server for a configured destination has become unavailable. All client connections to this server will be rejected until it becomes available again.

Recommended Action No action is required.

Error Message

%TXCONN-5-TARGETUP: CICS server [chars] is now available.

Explanation A CICS server that was previously unavailable has become available. All client connections to this server will now be accepted.

Recommended Action No action is required.

Error Message

%TXCONN-5-TRANSIDLETIMEOUT: Transaction [hex] of Client [IP_address] connected to server [chars] has timed out after [time-stamp].

Explanation The transaction was idle for too long, and the idle timeout configured for the CTRC server has expired.

Recommended Action No action is required.

Error Message

%TXCONN-3-TXEXCEPTION: Exception [chars] from transaction [chars] to [chars] from client [IP_address]

Explanation An unexpected transaction error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information. If possible, also provide the output of the **debug txconn data** command and an SNA line trace between the router and the remote database server for the period during which this message appeared.

Error Message

%TXCONN-3-UNEXPECTEDREQ: Unexpected client data, flushing out the request for client [IP_address] connected server [chars].

Explanation An invalid input stream has been detected and ignored.

Recommended Action No action is required.

UBR7200 Messages

The following are cable modem termination system error messages.

Error Message

%UBR7200-6-ACTIVE: Cable clock [chars] reference active

Explanation The clock reference has become active.

Recommended Action No action is required.

Error Message

%UBR7200-5-AUTHFAIL: Authorization failed for Cable Modem [enet] on interface [chars]

Explanation The registration of this modem has failed because of an invalid MIC string.

Recommended Action Ensure that the shared secret that is in the configuration file is the same as the shared secret that is configured in the cable modem.

Error Message

%UBR7200-3-BADARPREPLY: Interface [chars], ARP reply from invalid source. Expected SID=[dec], Actual SID=[dec]

Explanation A possible spoofing attempt has been detected.

Recommended Action Look for evidence of a spoofing attempt.

Error Message

%UBR7200-3-BADARPREQUEST: Interface [chars], ARP request from invalid source. IP=[IP_address], MAC=[enet], Expected SID=[dec], Actual SID=[dec]

Explanation A possible spoofing attempt has been detected.

Recommended Action Look for evidence of a spoofing attempt.

Error Message

%UBR7200-3-BADIPSOURCE: Interface [chars], IP packet from invalid source. IP=[IP_address], MAC=[enet], Expected SID=[dec], Actual SID=[dec]

Explanation A possible spoofing attempt has been detected.

Recommended Action Look for evidence of a spoofing attempt.

Error Message

%UBR7200-5-BADMNCSMSG: Invalid DOCSIS Message received from a Cable Modem for interface [chars]

Explanation A cable modem that is not DOCSIS-compliant has attempted to send an invalid DOCSIS message.

Recommended Action Locate the cable modem that sent this message and replace it with DOCSIS-compliant modem.

Error Message

%UBR7200-4-BADTXOFFSET: Bad timing offset [dec] detected for cable modem [enet].

Explanation The cable modem is not using the correct starting offset during initial ranging, causing a zero, negative timing offset to be recorded by the CMTS for this modem. The CMTS internal algorithms that rely on the timing offset parameter will not analyze any modems that do not use the correct starting offset. The modems may not be able to function, depending on their physical location on the cable plant.

Recommended Action Locate the cable modem based on the MAC address and report the initial timing offset problem to the cable modem vendor.

Error Message

%UBR7200-3-BADUSPORT: Interface [chars] Port U[dec] invalid, highest port number is U[dec]

Explanation The specified upstream port number was invalid.

Recommended Action Reenter the command using a valid upstream port number.

Error Message

%UBR7200-3-BURSTINUSE: Can not remove Burst Profile. Burst Profile is in use

Explanation The currently defined modulation profiles use the specified burst profile. The burst profile cannot be removed.

Recommended Action Remove any modulation profiles that use this burst profile and reenter the command.

Error Message

%UBR7200-3-CHASSIS: Unknown chassis model.

Explanation Data stored in the midplane is defective or incomplete.

Recommended Action Contact your Cisco technical support representative to update your system.

Error Message

%UBR7200-5-CLASSFAIL: Registration failed for Cable Modem [enet] on interface [chars][chars]: [chars]

Explanation The registration of the specified modem has failed because of an invalid or unsupported CoS setting.

Recommended Action Ensure that the CoS fields in the configuration file are set correctly.

Error Message

%UBR7200-6-CMOVED: Cable modem [enet] has been moved from interface [chars] to interface [chars].

Explanation The cable modem has been detected on a new interface.

Recommended Action No action is required.

Error Message

%UBR7200-3-CONFIG: Exceeds [dec] [chars]

Explanation The total bandwidth of fast and medium bandwidth port adapters exceeds the rated capacity of this system.

Recommended Action Refer to the configuration guidelines for the maximum allowed high and medium bandwidth port adapters for the system.

Error Message

%UBR7200-4-COOKIE: Corrupt or missing MAC address cookie using random base [enet]

Explanation Data stored in the midplane is defective.

Recommended Action Contact your Cisco technical support representative to update your system.

Error Message

%UBR7200-0-CPUCARD: CMTS([dec]/[dec]), Init failed, CSR[dec]=[hex].

Explanation A hardware failure involving the line card has occurred.

Recommended Action Replace the defective line card.

Error Message

%UBR7200-3-DBDSPDEAD: AWACS Slot [dec] is dead

Explanation The DSP of the daughter card has paused indefinitely.

Recommended Action Reload the image. If this message recurs, replace the defective daughter card.

Error Message

%UBR7200-6-DBDSPDOWNLOADDONE: Downloading dsp code completed

Explanation The downloading of the DSP code has been completed.

Recommended Action No action is required.

Error Message

%UBR7200-3-DBDSPDOWNLOADERR1: failed init download.

Explanation The DSP download has failed to initiate.

Recommended Action Reload the image. If this message recurs, replace the defective daughter card.

Error Message

%UBR7200-3-DBDSPDOWNLOADERR2: Failed downloading.

Explanation The DSP download has failed.

Recommended Action Reload the image. If this message recurs, replace the defective daughter card.

Error Message

%UBR7200-3-DBDSPDOWNLOADERR3: Failed end downloading.

Explanation The last step of the DSP download has failed.

Recommended Action Reload the image. If this message recurs, replace the defective daughter card.

Error Message

%UBR7200-6-DBDSPDOWNLOADSTART: Downloading dsp code initiated

Explanation The DSP code has started to download.

Recommended Action No action is required.

Error Message

%UBR7200-3-DBDSPERR1: DSP SRAM failed

Explanation A hardware failure involving the daughter card has occurred.

Recommended Action Replace the defective daughter card.

Error Message

%UBR7200-3-DBDSPERR2: DSP SRAM semaphore failed

Explanation A hardware failure involving the daughter card has occurred.

Recommended Action Replace the defective daughter card.

Error Message

%UBR7200-3-DBDSPERR3: DSP side dual-port SRAM failed

Explanation A hardware failure involving the daughter card has occurred.

Recommended Action Replace the defective daughter card.

Error Message

%UBR7200-3-DBDSPERR4: DSP FLASH memory failed

Explanation A hardware failure involving the daughter card has occurred.

Recommended Action Replace the defective daughter card.

Error Message

%UBR7200-3-DBDSPERR5: DSP failed for unknown reason([hex])

Explanation A hardware failure involving the daughter card has occurred.

Recommended Action Replace the defective daughter card.

Error Message

%UBR7200-3-DBDSPERR6: Switching to backup dsp image failed

Explanation A hardware failure involving the daughter card has occurred.

Recommended Action Replace the defective daughter card.

Error Message

%UBR7200-3-DBDSPIDERR: DSP id read [hex],expect [hex]

Explanation A hardware failure involving the daughter card has occurred.

Recommended Action Replace the defective daughter card.

Error Message

%UBR7200-5-DBDSPRECOVER1: Trying to switch to backup dsp image

Explanation The cable line card is attempting to recover the DSP by using the backup image.

Recommended Action No action is required.

Error Message

%UBR7200-5-DBDSPRECOVER2: Switching to backup dsp image succeeded

Explanation The cable modem has successfully switched to the backup DSP image.

Recommended Action No action is required.

Error Message

%UBR7200-5-DBDSPRECOVER3: Recovering and switching back to regular dsp image succeeded

Explanation The DSP recovery using the backup image has succeeded. The cable modem is now using the regular DSP image.

Recommended Action No action is required.

Error Message

%UBR7200-5-DBDSPUP: Handshake DSP is successful after [dec] ms delay

Explanation The DSP is up and running.

Recommended Action No action is required.

Error Message

%UBR7200-6-DBDSPVERSION: Current DSP version : [dec], DSP flash version : [dec]

Explanation This message displays the current code version and the version with which the DSP used to boot up (Flash version).

Recommended Action No action is required.

Error Message

%UBR7200-3-DBFPGAERR: XILINX not up, reset reg is [hex]

Explanation A hardware failure involving the daughter card has occurred.

Recommended Action Replace the defective daughter card.

Error Message

%UBR7200-3-DBPLX9050ERR: Plx9050 id read [hex],expect [hex]

Explanation A hardware failure involving the daughter card has occurred.

Recommended Action Replace the defective daughter card.

Error Message

%UBR7200-3-DBPLX9080ERR: Plx9080 id read [hex],expect [hex]

Explanation A hardware failure involving the daughter card has occurred.

Recommended Action Replace the defective daughter card.

Error Message

%UBR7200-1-DISCOVER: Only found [dec] interfaces on bay [dec], shutting down bay

Explanation A hardware or software error involving the line card has occurred.

Recommended Action Replace the line card.

Error Message

%UBR7200-6-DRVMP: Midplane TDM clock reference defaults to Clockcard

Explanation The clock card primary reference is from the midplane TDM clock.

Recommended Action No action is required.

Error Message

%UBR7200-4-DUPLICATEMAC: Cable modem [enet] is online on both interface [chars] and interface [chars].

Explanation The specified cable modem has been detected on two interfaces. This message indicates that two cable modems are using the same MAC address.

Recommended Action Check for cable modems with duplicate MAC addresses.

Error Message

%UBR7200-6-FREERUN: Cable clock in Freerun mode

Explanation The clock card is in free-run mode.

Recommended Action No action is required.

Error Message

%UBR7200-6-HOLDOVER: Cable clock in Holdover mode

Explanation The clock card has switched to holdover mode.

Recommended Action Check the reference source.

Error Message

%UBR7200-4-HWFAULT: Hardware Fault

Explanation A hardware error involving the clock card has occurred.

Recommended Action Replace the clock card.

Error Message

%UBR7200-3-INTERCEPT: Interface [chars], Failed to send intercept packet to server [IP_address]:[dec]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%UBR7200-6-LOS: Cable clock [chars] reference Loss of Signal

Explanation The clock reference was lost.

Recommended Action Check the reference source.

Error Message

%UBR7200-0-LOWPOWERCPU: uBR requires CPU card type NPE150 or higher

Explanation NPE100 is not supported for the cable modem. The cable modem requires a CPU card type of NPE150 or higher.

Recommended Action Upgrade the CPU card to a type of NPE150 or higher.

Error Message

%UBR7200-4-MACBLKSIZE: Unknown MAC address block size.

Explanation The data stored in the midplane is bad or incomplete.

Recommended Action Contact your Cisco technical support representative to update your system.

Error Message

%UBR7200-5-MAXHOST: New host with IP address [IP_address] and MAC [enet] on SID [dec] is ignored.

Explanation The maximum number of devices that can be attached to the cable modem has been exceeded. Therefore, the device with the specified IP address will not be added to the modem with the specified SID.

Recommended Action Locate the specified device and place the device on a different cable modem with another SID.

Error Message

%UBR7200-4-NOCPUVER: Invalid CPU ID, assuming revision 1

Explanation The CPU Revision ID is unreadable.

Recommended Action Update the CPU board.

Error Message

%UBR7200-3-NOFORK: Could not start Spectrum Management process

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%UBR7200-3-NOMAC: Can't allocate MAC address for interface [int]/[int]

Explanation The system is out of available MAC addresses.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%UBR7200-3-NOMEM: [chars]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%UBR7200-3-NOMORESIDS: Maximum number of SIDS have been allocated for interface [chars]

Explanation The maximum number of SIDs has been allocated to the specified line card.

Recommended Action Assign the cable modem to another line card.

Error Message

%UBR7200-5-NOMULTIPLEUPSTREAMS: Upstream Channel Change not valid for interface [chars]

Explanation The Cisco IOS software does not support this command for this interface.

Recommended Action Use this command on a multiple upstream line card.

Error Message

%UBR7200-3-NOTCMTS: Device reported [hex]

Explanation A hardware failure involving the specified device has occurred.

Recommended Action Replace the defective hardware.

Error Message

%UBR7200-5-NOTIMPLMENTEDMNCMSG: Not implemented DOCSIS MESSAGE received from a Cable Modem for interface [chars]

Explanation This cable modem does not support the type of message that is specified in the error message string. The system may be connected to a noncompliant modem.

Recommended Action This message is informational only. To ensure that there is no problem, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%UBR7200-3-NULLMAPPTR: Cannot send maps as current_map ptr is NULL, ds->[hex],current_map->[hex]: [chars]

Explanation An internal error has occurred. This error may have been caused by a memory problem.

Recommended Action Check the available memory. If necessary, add more memory to the system.

Error Message

%UBR7200-3-OVERLAPIP: Interface [chars], IP address [IP_address] from MAC [enet] is already in use. SID = [dec]

Explanation A spoofing attempt might have been detected.

Recommended Action Look for a possible spoofing attempt.

Error Message

%UBR7200-5-OVERLIMIT: Interface [chars]
Current total reservation of [dec] bps on Port U[dec], exceeds its
maximum configured reservation limit of [dec] bps\n

Explanation The currently reserved capacity on the upstream channel already exceeds its virtual reservation capacity, based on the configured subscription level limit. Increasing the subscription level limit on the current upstream channel will place you at risk of being unable to guarantee the individual reserved rates for modems since this upstream channel is already oversubscribed.

Recommended Action Load-balance the modems that are requesting the reserved upstream rate on another upstream channel.

Error Message

%UBR7200-3-OWNERR: CMTS([dec]/[dec]), Buffer ownership error, pak=[hex].

Explanation A hardware failure involving a board has occurred.

Recommended Action Replace the defective board.

Error Message

%UBR7200-6-PREAMLENADJUST: [chars] burst's preamble length in modulation profile
[dec]
is adjusted to the operable value.

Explanation The preamble length in the burst profile has adjusted to the valid value.

Recommended Action No action is required.

Error Message

%UBR7200-4-RECALLED_NPE: Old version NPE-175/225 with Rev = [hex] system
controller. Contact
upgrades-info@cisco.com for replacement

Explanation An NPE-175/225 board has been recalled because of an error in the system controller chip.

Recommended Action Replace the NPE-175/225 board.

Error Message

%UBR7200-6-REFLOCK: Cable clock locked to [chars] reference

Explanation The clock card has locked onto its clock source.

Recommended Action No action is required.

Error Message

%UBR7200-3-SLOTS: Number of slots in chassis is undefined.

Explanation The data stored in the midplane is corrupted or incomplete.

Recommended Action Contact your Cisco technical support representative to update your system.

Error Message

%UBR7200-3-SPIERRNRD: SPI PENDING NO READ DATA([chars]): spistat=[hex],
chid=[hex], cmd=[hex], regaddr=[hex]

Explanation A read error on the PHY chip serial communications bus has occurred. This condition indicates a defective line card.

Recommended Action Replace the defective line card.

Error Message

%UBR7200-3-SPIERRR: SPI PENDING READ ERROR([chars]): spistat=[hex], chid=[hex],
cmd=[hex], regaddr=[hex]

Explanation A read error on the PHY chip serial communications bus has occurred. This condition indicates a defective line card.

Recommended Action Replace the defective line card.

Error Message

%UBR7200-3-SPIERRRBS: SPI BUS READ [hex] BYTES SHORT([chars]): spistat=[hex],
chid=[hex], cmd=[hex], regaddr=[hex]

Explanation A read error on the PHY chip serial communications bus has occurred. This condition indicates a defective line card.

Recommended Action Replace the defective line card.

Error Message

```
%UBR7200-3-SPIERRW: SPI PENDING WRITE ERROR([chars]): spistat=[hex], chid=[hex],  
cmd=[hex], regaddr=[hex]
```

Explanation A write error on the PHY chip serial communications bus has occurred. This condition indicates a defective line card.

Recommended Action Replace the defective line card.

Error Message

```
%UBR7200-3-SPIERRW_CHID: Invalid Channel ID([chars]): chid=[hex], cmd=[hex],  
regaddr=[hex]
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%UBR7200-6-SRCMP: Cable Clock primary reference is midplane TDM clock
```

Explanation The clock card primary reference is from the midplane TDM clock.

Recommended Action No action is required.

Error Message

```
%UBR7200-0-TEMPHIGH: [chars] measured at [chars] is too high: shutdown temperature  
[chars]
```

Explanation The current temperature exceeds the maximum shutdown temperature.

Recommended Action Determine the cause of the high temperature and correct it if possible.

Error Message

```
%UBR7200-5-TIMESCH: Time scheduled event, spectrum group [int], [chars]
```

Explanation A time-scheduled reconfiguration event has occurred on the specified interface.

Recommended Action No action is required.

Error Message

%UBR7200-5-UNAUTHSIDTIMEOUT: CMTS deleted BPI unauthorized Cable Modem [enet]

Explanation An unauthorized cable modem has been deleted to enforce BPI authorization for the specified cable modem. The specified cable modem was not performing BPI negotiation.

Recommended Action Check the modem interface configuration for privacy mandatory, or check for errors in the TFTP configuration file.

Error Message

%UBR7200-4-UNKNOWN SID: SID cannot be resolved from the leasequery reply for IP [IP_address]

Explanation The relay-agent option might not be configured.

Recommended Action Ensure that the relay-agent option is configured and that the save-relay-agent data is enabled on CNR.

Error Message

%UBR7200-5-UNREGSIDTIMEOUT: CMTS deleted unregistered Cable Modem [enet]

Explanation An unregistered cable modem has been deleted to avoid unaccounted bandwidth usage.

Recommended Action Check the cable modem interface configuration for registration bypass, or check for errors in the TFTP configuration file.

Error Message

%UBR7200-5-UPDOWN: Interface [chars] Port U[dec], changed state to [chars]

Explanation The upstream port was brought up or down.

Recommended Action No action is required.

Error Message

%UBR7200-5-USCONTEND: Interface [chars] Port U[dec], continuous frequency hop ended at [int].[int] MHz

Explanation At least one modem came back online. This message logs the abortion of continuous frequency hop.

Recommended Action No action is required.

Error Message

%UBR7200-5-USCONTHOP: Interface [chars] Port U[dec], continuous frequency hop started

Explanation All modems have gone offline. This message logs the start of continuous frequency hop.

Recommended Action No action is required.

Error Message

%UBR7200-5-USFREQCHG: Interface [chars] Port U[dec], frequency changed to [int].[int] MHz

Explanation The upstream channel frequency has been changed.

Recommended Action No action is required.

Error Message

%UBR7200-5-USIPLCHG: Interface [chars] Port U[dec], input power level changed to [dec] dBmV

Explanation The upstream channel input power level has been changed.

Recommended Action No action is required.

Error Message

%UBR7200-5-USIPLFIX: Interface [chars] Port U[dec], input power level fixed at [dec] dBmV

Explanation Setting the upstream frequency to a fixed value has caused the upstream input power level to assume a fixed value.

Recommended Action No action is required.

Error Message

%UBR7200-4-VERSION_MISMATCH: Midplane data version mismatch.

Explanation Data stored in the midplane is out of date and requires an update.

Recommended Action Contact your Cisco technical support representative to update your system.

Error Message

%UBR7200-0-VOLTHIGH: [chars] measured at [chars] is too high: shutdown voltage [chars]

Explanation The current voltage exceeds the maximum shutdown voltage.

Recommended Action Determine the cause of the high voltage and correct it if possible.

Error Message

%UBR7200-0-VOLTLOW: [chars] measured at [chars] is too low: shutdown voltage [chars]

Explanation The current voltage exceeds the minimum shutdown voltage.

Recommended Action Determine the cause of the low voltage and correct it if possible.

UCODE Messages

The following are microcode error messages.

Error Message

%UCODE-3-BADCHKSUM: Bad checksum in [chars], found [hex] expected [hex]

Explanation The microcode file has become corrupted. The checksum that was computed after reading the file from Flash memory does not match the checksum in the file. The file will not be downloaded, and the onboard ROM microcode will be used instead.

Recommended Action Reload the microcode. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%UCODE-3-BADHWVER: Ucode file [chars] requires [chars] version [dec].x hardware

Explanation A mismatch was detected during an attempt to load a microcode file into an interface processor. The hardware requires a different version from the one specified.

Recommended Action Use the required microcode version.

Error Message

%UCODE-3-HDRCORRUPT: Ucode header corrupted in [chars], found [hex] expected [hex]

Explanation The microcode file has become corrupted. The checksum computed after reading the file from Flash memory does not match the checksum in the file. The file will not be downloaded, and the onboard ROM microcode will be used instead.

Recommended Action Reload the microcode. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%UCODE-3-IPCBUFFAIL: Unable to obtain IPC resources

Explanation The IPC service used to download the microcode to the interface processors has failed to obtain a buffer. The interface processors will not load properly.

Recommended Action Reload the microcode. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%UCODE-3-IPCINITFAIL: Unable to initialize IPC [chars] services

Explanation The IPC service used to download microcode to the interface processors has failed to initialize. The interface processors will not load properly.

Recommended Action Reload the router to resolve the problem.

Error Message

%UCODE-3-IPCINVALID: Invalid IPC request ([dec]) received from ([hex])

Explanation The IPC service used to download microcode to certain interface processors has received an invalid message.

Recommended Action Ensure that the proper revisions of code are selected.

Error Message

%UCODE-3-LDFAIL: Unable to download ucode from [chars] in slot [dec], trying [chars] ucode

Explanation 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 Reload the microcode. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%UCODE-3-NOBUF: Unable to allocate memory for ucode buffer

Explanation A buffer is required for decompression of the microcode before it is loaded into an interface processor. This buffer could not be allocated.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%UCODE-3-NOFILE: Ucode file [chars] not found, system ucode loaded in slot [dec]

Explanation The file specified by the configuration was not found in Flash memory. The onboard ROM microcode will be loaded so that the interface can remain operational.

Recommended Action Enter the **show flash** command to determine if the file is located in Flash memory. If the file is located in Flash memory, attempt to reload the microcode. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%UCODE-3-NOROM: Invalid attempt to load ROM ucode in slot [dec]

Explanation Some interface processors cannot load the microcode from ROM. This condition is caused by an invalid configuration statement.

Recommended Action Remove the invalid configuration statement.

Error Message

%UCODE-5-OBSOLETE: FDDI unit [dec] has obsolete microcode: please upgrade it

Explanation An FDDI interface processor has been found running microcode that does not support microcode CMT, which is required for all Cisco IOS software releases for Release 10.2 and later.

Recommended Action Upgrade the microcode on the interface processor.

Error Message

%UCODE-3-RDFAIL: Unable to read ucode file [chars] from flash

Explanation The microcode file could not be read from Flash memory. The Flash memory might be locked by another process or otherwise unavailable.

Recommended Action Enter the **show flash** command to determine whether the Flash memory is in use and reenter the **microcode reload** command when the Flash memory is free. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%UCODE-3-SRCTYPE: Invalid Ucode source type ([dec])

Explanation The specified microcode source type is not supported on the given platform.

Recommended Action Ensure that the proper revisions of code are selected.

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 this message recurs after the onboard ROM microcode is loaded, contact your Cisco technical support representative for assistance.

Error Message

%UCODE-3-VERSIONCK: Inappropriate version [int].[int] for [chars]

Explanation An attempt was made to load an inappropriate version of microcode.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

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 from the interface processor that is specified in the configuration. A configuration error has occurred. The onboard ROM microcode will be loaded.

Recommended Action Confirm the interface type, reenter the microcode configuration command, and reload the microcode.

UDLD Messages

The following are UniDirectional Link Detection (UDLD) protocol error messages.

Error Message

%UDLD-3-UDLD_IDB_ERROR: UDLD error handling [chars] interface: [chars]

Explanation A software error has occurred during UDLD processing for the specified interface.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%UDLD-3-UDLD_INTERNAL_ERROR: UDLD internal error: [chars]

Explanation A software sanity check has failed during UDLD processing.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%UDLD-3-UDLD_INTERNAL_IF_ERROR: UDLD internal error, interface [chars]: [chars]

Explanation A software sanity check has failed during UDLD processing.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%UDLD-4-UDLD_ONEWAYPATH: UDLD detected one-way path on interface [chars] with port [chars], device [chars]

Explanation A one-way path was detected on the specified interface. This condition is most likely caused by either a failed interface hardware or a cable misconfiguration.

Recommended Action Investigate the causes of the problem by checking the interface hardware and cables. Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%UDLD-4-UDLD_PORT_DISABLED: UDLD disabled interface [chars], [chars] detected

Explanation An interface was disabled. UDLD protocol has detected the condition. The interface and cause of the condition is specified in the error message. This condition is most likely caused by either a failed interface hardware or a cable misconfiguration.

Recommended Action Investigate the causes of the problem by checking the interface hardware and cables. Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

UNIX Messages

The following are UNIX error messages.

Error Message

```
%UNIX-1-SYSABORT: System aborted
```

Explanation The system has aborted.

Recommended Action Record the output from the following commands, contact your Cisco technical support representative, and provide the representative with the gathered information.

- **show proc mem** (Enter this command twice.)
- **show memory**
- **show buffers**
- **show version**
- **show running-config**

UTIL Messages

The following are utility error messages.

Error Message

```
%UTIL-6-RANDOM: A pseudo-random number was generated twice in succession
```

Explanation A pseudorandom number generator has produced the same number twice in succession.

Recommended Action Under normal circumstances, a pseudorandom number generator will occasionally produce the same number twice in succession, and this is not a problem. If this message occurs frequently, reload the system. If this message recurs, copy the error message exactly as it appears, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%UTIL-3-RANGEINCON: internal inconsistency [dec] [hex]
```

Explanation A fatal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%UTIL-3-RANGENULLINPUT: null pointer input to range function

Explanation An attempt was made to access a range function with a null pointer. The range list creation has failed.

Recommended Action Review the error log for a corresponding memory allocation failure message. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%UTIL-3-TREE: Data structure error--[chars]

Explanation A software error has occurred, resulting in a data structure inconsistency.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information. Ask the representative for assistance in obtaining a version of code that has the error fixed.

VFC Messages

The following are Voice over IP (VoIP) error messages.

Error Message

%VFC-3-ERROR_ANALYZE: [chars], Error analyzing the device in slot [dec].

Explanation The feature card in the specified slot could not be recognized.

Recommended Action Power down, reinsert the voice feature card, and reboot. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VFC-3-ERROR_INIT_BLDR: [chars] Unable to download the Boot loader firmware, ret = [hex]

Explanation An error involving the initialization of the DSP with the bootloader firmware has occurred.

Recommended Action Power down, reinsert the port module, and reboot. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VFC-3-ERROR_INIT_OVERLAY: [chars] Unable to download the Application overlay firmware. Status returned [hex]

Explanation An error involving the initialization of the DSP with the application or overlay firmware has occurred.

Recommended Action Power down, reinsert the port module, and reboot. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VFC-1-ERROR_INTR: [chars] , Error interrupt occurred type = [hex].

Explanation The DMA engine cannot get to the PCI bus to read the descriptors.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VFC-1-INCORRECT_DSP_ID: VFC in slot [dec]: Incorrect [dec] DSP-ID passed by SPI.

Explanation The DSP ID provided by the SPI for download is not valid.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VFC-3-INCORRECT_ID: VFC in slot [dec]: PCI device not supported.

Explanation An interface controller device did not report a correct device ID.

Recommended Action Power down, reinsert the port module, and reboot. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VFC-1-INVALID_CONFIGURATION: vfc([dec]), vfc cards has an invalid configuration.

Explanation The Cisco IOS software recognized more DSP interface ports than can be supported on the card; therefore, the VFC has an invalid configuration.

Recommended Action Check the part number on the VFC to see if it is supported by the version of Cisco IOS software that is operational on the router or contact your Cisco technical support representative.

Error Message

%VFC-1-NODPMEMORY: VFC ([dec]/[dec]), vfc dual-ported memory unavailable.

Explanation The router or access server could not allocate dual-ported memory for the descriptors.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VFC-1-NO_DSPM: vfc([dec]), No dsp module has been found.

Explanation The Cisco IOS software did not detect any DSP modules plugged into the voice card.

Recommended Action Check the part number on the DSPM card to see if it is supported in the version of Cisco IOS software that is operational on the router or contact your Cisco technical support representative.

Error Message

%VFC-1-NO_RING_DESCRIPTOR: No more ring descriptors available on [dec] slot.

Explanation The VFC driver cannot queue messages onto the DMA engine for transmit.

Recommended Action Reset the DSPs on this port module. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VFC-1-TOOBIG: [hex] packet(size [dec]) too big.

Explanation A packet greater than 256 bytes has been received on this interface.

Recommended Action The system should recover. No action is required. If the problem recurs, it indicates an error that might be related to data traffic patterns. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VFC-1-UNKNOWN_DSPM: vfc([dec]), vfc dspm daughter card has an unknown id of [hex]

Explanation The software did not recognize the type of DSP module that is plugged into the voice card.

Recommended Action Check the part number on the DSPM card to see if it is supported in the version of Cisco IOS software that is operational on the router or contact your Cisco technical support representative.

VINES Messages

The following are Banyan VINES error messages.

Error Message

%VINES-2-BADPARAM: [chars] called with [chars] parameter set to [chars]

Explanation One of the Banyan VINES lookup functions was requested with an illegal argument.

Recommended Action Copy the message exactly as it appears, run a memory dump up to 128 bytes, and confirm the location specified in the error message. Contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%VINES-2-BADTIMER: RTP timer for [chars] was found disabled, and was reset

Explanation An internal interface timer is not running. This condition usually occurs after an interface has been reset.

Recommended Action No action is required. The system automatically restarts the timer.

Error Message

%VINES-2-CACHEFAILED: Cannot build cache entry ([dec] bytes) for [v-name] on [chars]

Explanation Banyan VINES fast switching has detected that the packet destined to a given address did not have proper encapsulation information or its encapsulation size was too large to fit into the cache.

Recommended Action Ensure that the VINES encapsulation and interface-specific mappings for the specified interface are configured correctly. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VINES-2-CACHEUNSUPP: Caching of [chars] not supported on [chars]

Explanation The cache population routing for Banyan VINES fast switching was requested for an interface that does not support VINES fast switching.

Recommended Action If other encapsulation types are available on the interface, try using them. If this problem is not limited to one or two destinations (but rather occurs with all traffic using the interface), disable VINES fast switching for the interface until you have identified the real cause of the problem. If you need assistance, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VINES-2-CONSISTENCY: Error [chars]

Explanation An error involving the Banyan VINES code has occurred. This error message will provide additional information to identify one of two possible causes:

- An IPC port number needs to be allocated, but all 65,535 port numbers are currently in use.
- VINES has attempted to add a cache entry, but no path is associated with the destination address.

This problem may cause temporary slow performance to the stations that have experienced this inconsistency until complete cache entries are added. However, connectivity should not be lost, because all data traffic can still be routed via process-level switching.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information. If the warning message is about IPC port number depletion, use the **show vines ipc** command to check how many IPC ports are currently in use by which services and determine whether the IPC connections are all legitimate. To release IPC ports, issue the **clear vines ipc** command. If the warning message is about VINES cache entries, provide the contents of the VINES route cache, neighbor, and route tables immediately after the error messages appeared. If the problem persists, issue the **clear vines cache** command, and monitor the router if the situation improves.

Error Message

%VINES-2-CORRUPTENTRY: Detected a corrupted entry in the [chars] table

Explanation The Banyan VINES code has detected a corrupted internal table entry.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information. If possible, clear the VINES routing table or neighbor table in which the corrupted entry was observed. Clearing the routing or neighbor table will result in a temporary loss of connectivity until the table is rebuilt.

Error Message

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

Explanation The router has detected that its Banyan VINES address is being used by another router.

Recommended Action To identify the other router that is using this address, manually inspect each the configuration of each router. When you have identified the router with the duplicate address, issue the **vines routing** command on both routers or issue the **enable vines routing** command, specifying specify a unique address. If one of the routers does not support the **recompute** keyword, disable VINES on that router, issue the **write terminal** command to save the configuration to memory, reboot the router, and then enter the **vines routing** command with a unique VINES address on the affected routers until each router has a unique address.

Error Message

%VINES-2-ENCAPFAILED: Encapsulation failed for [v-name] via [v-name] on [chars]

Explanation Banyan VINES fast switching has 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. If this error results in lost connectivity, disable VINES fast switching by issuing the **no vines route-cache** command. Because disabling fast switching will slow network perform, you should issue the **vines route-cache** command to reenable fast switching as soon as you have identified the cause of the problem. If you cannot identify the cause, contact your Cisco technical support representative. Provide the output of the **show vines cache**, **show vines neighbor**, and **show vines route** commands for the destination address and neighboring routers you are using. Also provide the output of the **show interface** and **show vines interface** commands for the incoming and outgoing interfaces.

Error Message

%VINES-6-FNNOTFOUND: [chars] service [chars] routine missing [chars] vector

Explanation There is an inconsistency in the static Banyan VINES data structures for handling application-layer packets.

Recommended Action Turn on VINES service level debugging for the service reported in the error message, and copy the debug traces and the error message exactly as they appear in the system log. Contact your Cisco technical support representative and provide the representative with the gathered information.

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 Banyan VINES path structure actually points to some other structure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information. If possible, clear the VINES neighbor table. Clearing the VINES table will result in a temporary loss of connectivity until all neighbors and routes are relearned.

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 Banyan VINES route structure actually points to some other structure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information. If possible, clear the VINES routing table. Clearing the VINES table will result in a temporary loss of connectivity until all routes are relearned.

Error Message

```
%VINES-6-IPCNOROUTINE: IPC port [dec] registered without an upcall ([chars])
```

Explanation There is an inconsistency in the active Banyan 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 Examine the IPC ports currently supported on the router by issuing the **show vines ipc** command, and see whether the reported IPC port is indeed not active. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information along with the output of the **debug vines ipc** command.

Error Message

```
%VINES-2-NOBUFFERS: No buffers available for [chars]
```

Explanation There were no buffers available to send a Banyan VINES service query or reply.

Recommended Action Examine the system memory and buffer capacity and compare it with current usage. If you notice a substantial discrepancy, monitor your system for possible memory leaks or buffer drainage and report the problem to your Cisco technical support representative. Provide the representative with the output gathered from the following commands:

- **show memory**
- **show memory processor**
- **show buffers**
- **show buffers assigned**
- **show buffers old**

Error Message

```
%VINES-2-NOVENCAP: Encapsulation failed on [chars] for address [v-name]
```

Explanation The Banyan VINES code tried to send a packet on an interface that does not have a new encapsulation routine for outbound packets.

Recommended Action Toggle the interface by issuing the **interface shut** and **no shut** commands, and then issue the **no vines metric** and **vines metric** commands. If the problem persists, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information. If possible, turn on and provide interface-specific debug traces, particularly for VINES activities.

Error Message

```
%VINES-6-RPCNOSERVICE: IPC port [dec] registered without a service
```

Explanation There is an inconsistency in the active Banyan 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 Enter the **show vines ipc** command and see whether the reported IPC port has a registered service. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information. If possible, provide the output of the **debug vines netrpc** command.

Error Message

```
%VINES-6-RTNNOTFOUND: [chars] service [chars] routine not found while [chars]
```

Explanation There is an inconsistency in the active Banyan VINES service description data structures. A service handler routine cannot find the description of its own service.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information. In addition, provide the output of the **show vines service** and **debug vines service traces** commands for the service reported in the error message.

VIP Messages

The following are Versatile Interface Processor (VIP) error messages.

Error Message

```
%VIP-3-AFOVERFLOW: VIP address filter table full
```

Explanation The VIP Ethernet interface uses an internal MAC address table to filter incoming packets. When the table is full, additional address entries are rejected. The MAC address table is consumed by entries for various protocols, such as PIM or HSRP. An incoming packet had a destination address different from the MAC addresses that were included in a full table. Therefore, the packet will be ignored.

Recommended Action Distribute some of those HSRP entries to another Ethernet interface.

Error Message

```
%VIP-3-BADMALUCMD: Unsupported MALU command [dec], arg=[hex], pascb=[hex]
```

Explanation The RP or the RSP has forwarded an unsupported command that the Cisco IOS software does not recognize.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VIP-3-CMDNOPASCB: PASCB Null for command [dec], arg=[hex]
```

Explanation The RP or the RSP has forwarded an unsupported command that the Cisco IOS software does not recognize.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VIP-3-NODISPATCH: Dispatch vector Null, cmd=[dec], dintf=[dec]
```

Explanation No command dispatch vector was found for the specified interface.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VIP-2-NOICBS: No MEMD icbs left for PA [dec] Interface [dec]
```

Explanation No SP interrupt control block structure was associated with the port adapter or the interface.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VIP-3-UNDEFIDBTYPE: Undefined idb type [dec]
```

Explanation The Versatile Interface Processor (VIP) kernel has identified a media type other than Ethernet, Token Ring, or serial. These are the media types supported by Cisco IOS Release 11.2 on the VIP. This error might be caused by having an older version of the software running on a device with a new VIP port adapter.

Recommended Action Check whether your version of Cisco IOS software supports the VIP port adapter. If an old software version does not appear to be the problem, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

VIPMLP Messages

The following are Multilink PPP error messages.

Error Message

%VIPMLP-2-NOVC: [chars]: packet received for non-existent VC [dec]

Explanation A virtual channel encapsulation has been corrupted.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

VOICE_FSM Messages

The following are MC3810 voice FSM subsystem error messages.

Error Message

%VOICE_FSM-3-ERROR: [chars]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VOICE_FSM-5-MC3810_NOTICE: [chars]

Explanation This is a notification message only.

Recommended Action No action is required.

VOICE_RC Messages

The following are MC310 voice resource subsystem error messages.

Error Message

%VOICE_RC-3-ERROR: [chars]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VOICE_RC-5-MC3810_NOTICE: [chars]
```

Explanation This message is informational only.

Recommended Action No action is required.

VOIPAAA Messages

The following are error messages for Voice over IP (VoIP) authentication, authorization, and accounting (AAA).

Error Message

```
%VOIPAAA-5-VOIP_CALL_HISTORY: CallLegType [dec], ConnectionId [hex] [hex] [hex]
[hex], SetupTime [chars], PeerAddress [chars], PeerSubAddress [chars],
DisconnectCause [chars], DisconnectText [chars], ConnectTime [chars],
DisconnectTime [chars], CallOrigin [dec], ChargedUnits [dec], InfoType [dec],
TransmitPackets [dec], TransmitBytes [dec], ReceivePackets [dec], ReceiveBytes
[dec]
```

Explanation This message lists the call history detail output. This information is used for simple accounting. The fields, which are in ASCII format and delimited by commas, can be stored using syslog and passed on to other billing or processing software on a server.

Recommended Action No action is required.

VPA Messages

The following are voice port adapter error messages.

Error Message

```
%VPA-3-BADVC: [chars] [dec]/[dec] got bad VC packet
[hex] [hex] [hex] [hex] [hex] [hex] [hex] [hex]
```

Explanation An interface has received a packet with a bad VC encapsulation. This condition indicates either a software or hardware problem.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%VPA-3-CMDFAIL: [chars] Command Failed at [chars] - line [dec], arg [dec]

Explanation The voice port adapter has failed to process a command.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VPA-3-INITFAIL: VPA (bay [dec]), Init Failed at [chars] - line [dec] arg [hex]

Explanation The voice port adapter has failed to complete its hardware initialization.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VPA-6-NODATA: Data call is not supported on [chars].

Explanation Data calls are not supported in this version of Cisco IOS software.

Recommended Action Remove the data call configuration and setup.

Error Message

%VPA-6-NOTDMBP: No TDM backplane is supported on slot [dec].

Explanation The DS0 interslot cannot be cross-connected without the TDM backplane.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VPA-6-NOTSUPPORT: Voice PA is not supported in this platform.

Explanation The voice port adapter is not supported in this platform.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VPA-1-RPTFAIL: [chars] failed to send report [dec] at [chars] - line [dec]
```

Explanation The voice port adapter has failed to send a report from the VIP.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VPA-6-RXDFILLFAIL: VPA (bay [dec]), Data rx ring refill failed:  
rx_d_fill_fail=[dec]
```

Explanation The voice port adapter has failed to refill the data Rx ring.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VPA-6-RXVFILLFAIL: VPA (bay [dec]), Voice rx ring refill failed:  
rxv_fill_fail=[dec]
```

Explanation The voice port adapter has failed to refill the voice Rx ring.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VPA-3-TDMFAIL: VPA-TDM, access failed at [chars] - line [dec],  
arg1=[hex],arg2=[hex]
```

Explanation The voice port adapter has failed to access the TDM switch.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VPA-3-TSBSY: VPA (bay [dec]), TDM timeslot is busy: ST=[dec]/TS=[dec]
```

Explanation The voice port adapter has failed to grant a cross-connect setup request.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VPA-3-TSNONBUSY: VPA (bay [dec]), TDM timeslot is non busy: ST=[dec]/TS=[dec]
```

Explanation The voice port adapter has failed to grant a cross-connect teardown request.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VPA-5-TXVFULL: VPA (bay [dec]), Voice tx ring is full: dma_done=[dec],
last_dma_done=[dec]
```

Explanation The voice Tx ring of the voice port adapter is full.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VPA-3-UNEXPEVENT: VPA (bay [dec]), received an unexpected event=[hex]
```

Explanation The voice port adapter has received an unexpected event from the firmware.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

VPD Messages

The following are ATM CES (Voice Processor Deck) driver error messages.

Error Message

```
%VPD-4-CESCLK_CHANGE:
ATM CES (Voice Processor Deck) clock [dec]/0 transitioned from
Priority [dec] [chars] [chars] to Priority [dec] [chars] [chars]\n
```

Explanation The clock source has changed.

Recommended Action No action is required.

Error Message

```
%VPD-4-CESCLK_INIT:
ATM CES (Voice Processor Deck) clock source initialized to local oscillator.\n
```

Explanation The ATM CES (voice processor deck) will use the internal clock.

Recommended Action No action is required.

Error Message

```
%VPD-4-CESCLK_PLL_LOST_LOCK:  
ATM CES (Voice Processor Deck) clock [dec]/0 Tx PLL lost lock!  
Priority [dec] [chars] [chars] - Tx PLL failed.\n
```

Explanation The clock source has failed.

Recommended Action An alternate clock source will be used if one is available.

Error Message

```
%VPD-1-UNKNOWN_VIC: VPD in slot [dec]: VIC daughter card has an unknown id of [hex]
```

Explanation The software did not recognize the type of VIC plugged in to the voice processor deck.

Recommended Action Check the part number on the VIC card to see if it is supported in the version of Cisco IOS software that is operational on the router, or contact your Cisco technical support representative.

Error Message

```
%VPD-1-UNSUPPORTED_VIC: VPD in slot [dec]: VIC daughter card ([chars]/[hex]) is  
unsupported
```

Explanation The VIC card that is plugged in to the VPD is not a type that is supported by this version of Cisco IOS software.

Recommended Action Replace this VIC with a type that is supported by this version of Cisco IOS software, or change the version of Cisco IOS software to support this VIC type.

Error Message

```
%VPD-1-VPD_INIT_FAILURE: An error was encountered during initialization of ATM CES  
(Voice Processor Deck) port adapter in slot [dec].
```

Explanation The port adapter has failed its initialization.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

VPDN Messages

The following are Virtual Private Dialup Networking (VPDN) error messages.

Error Message

```
%VPDN-6-AUTHENERR: [chars] [chars] [chars] cannot authenticate for [chars] [chars] [chars][chars][chars]
```

Explanation The NAS/LAC or HGW/LNS is unable to locate a AAA server for the purposes of authenticating the user or tunnel. This error indicates that the router was unable to establish a network connection with the designated server. This error message may contain a reason string that identifies the point of failure.

Recommended Action Check the AAA configuration on the NAS/LAC or HGW/LNS and the network connectivity to the AAA server.

Error Message

```
%VPDN-6-AUTHENFAIL: [chars] [chars] [chars], [atalk_address]uthentication failure [chars]for [chars] [chars] [chars][chars][chars]
```

Explanation The NAS/LAC or HGW/LNS has failed to authenticate a user or a tunnel, or the HGW/LNS has failed authentication with the client that initiated the session. For errors that involve user or tunnel authentication failures, this error message will contain a reason string that identifies the point of failure.

Recommended Action If the HGW/LNS is failing authentication check the username configuration on the NAS/LAC or HGW/LNS and possibly even on the client. Removing the negotiation of outbound authentication (for example, by authenticating the user only in the inbound direction) is one possible solution. If AAA is applicable, check the AAA configuration on the NAS/LAC or HGW/LNS and network connectivity to the AAA server.

Error Message

```
%VPDN-6-AUTHORERR: [chars] [chars] [chars] cannot authorize for [chars] [chars] [chars][chars][chars]
```

Explanation The NAS/LAC or HGW/LNS is unable to locate a AAA server for the purposes of authorizing the user or tunnel. The router was unable to establish a network connection with the designated (configured) server. This error message may contain a reason string that identifies the point of failure.

Recommended Action Check the AAA configuration on the NAS/LAC or HGW/LNS and the network connectivity to the AAA server.

Error Message

```
%VPDN-6-AUTHORFAIL: [chars] [chars] [chars], [atalk_address]authorization failure
for [chars] [chars] [chars][chars][chars]
```

Explanation The NAS/LAC or HGW/LNS has failed to authorize a user or a tunnel. This error message might contain a reason string that identifies the point of failure.

Recommended Action Check authorization configuration on the NAS/LAC or HGW/LNS. If AAA is applicable, check network connectivity to the AAA servers.

Error Message

```
%VPDN-6-CLOSED: [chars] [chars] [chars] closed [chars] [chars]
[chars][chars][chars]
```

Explanation The remote server, typically the HGW/LNS, has closed this session. The reason for the closure is encoded in a hexadecimal format and corresponds to the particular protocol descriptions; for example, for L2F the values are documented in section 4.4.5 of the Internet Draft. A description string that describes the closure reason might also be present.

Recommended Action Check the configuration on the NAS/LAC or HGW/LNS.

Error Message

```
%VPDN-6-DOWN: [chars] [chars] [chars] changed state to down [chars] [chars]
[chars][chars][chars]
```

Explanation The remote server, typically the HGW/LNS, closed this tunnel. The reason for the closure is encoded in a decimal format, which corresponds to the particular protocol descriptions (for example, for L2F, the values are documented in section 4.4.5 of the Internet Draft).A description string that describes the reason for this closure may also be included in the message.

Recommended Action Check the configuration of the NAS/LAC or the HGW/LNS.

Error Message

```
%VPDN-6-MAX_SESS_EXCD: [chars] [chars] [chars] has exceeded configured local
session-limit and rejected [chars] [chars] [chars][chars][chars]
```

Explanation The NAS/LAC or HGW/LNS has refused this session because the configured maximum VPDN session limit has been reached.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VPDN-4-MIDERROR: [chars] [chars] [chars] unable to terminate user [chars][chars][chars]

Explanation The HGW/LNS could not forward the VPDN user because of an internal error. This error may be either resource-/ or configuration-related. The error message may contain a reason string that reports the point of failure.

Recommended Action Check the configuration on the HGW/LNS.

Error Message

%VPDN-5-NOIDB: [chars] [chars] [chars] unable to terminate user [chars]

Explanation The HGW/LNS has reached the maximum number of interfaces allowed on the router and cannot create sessions for users forwarded by VPDN.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VPDN-3-NORESOURCE: [chars] [chars] [chars] no resources for user [chars][chars][chars]

Explanation The NAS/LAC or HGW/LNS is out of resources to forward a VPDN user.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VPDN-4-REFUSED: Session for [chars] Refused status = [hex]

Explanation The remote server has refused this session.

Recommended Action Check the configuration on the HGW/LNS.

Error Message

%VPDN-6-RESIZE: Updated [chars] MID table size to [int]

Explanation The NAS/LAC or HGW/LNS has altered the size of the MID table through command line configuration.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VPDN-6-SOFTSHUT: [chars] [chars] [chars] has turned on softshut and rejected
[chars] [chars] [chars][chars][chars]
```

Explanation The NAS/LAC or HGW/LNS can no longer accept new connections when the **vpdn softshut** command has been entered. This feature prevents new sessions from being established on a VPN tunnel. The existing session will continue until termination.

Recommended Action To disable the VPDN feature and return the VPN tunnel to active service, enter the **no vpdn softshut** command.

Error Message

```
%VPDN-6-TIMEOUT: [chars] [chars] [chars] disconnected [chars] [chars]
[chars][chars][chars]
```

Explanation The NAS/LAC or HGW/LNS has disconnected the user because the timer has expired. This error may be related to a PPP negotiation error or might be an absolute timeout for the session.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VPDN-5-UNREACH: [chars] [chars] [chars] is unreachable
```

Explanation The NAS/LAC or HGW/LNS has timed out while attempting to establish a tunnel connection to a HGW/LNS or NAS/LAC. This error might be caused by network, authentication, or authorization issues.

Recommended Action Check configuration on the NAS/LAC or HGW/LNS. Check the network connectivity between the NAS/LAC and the HGW/LNS. Ensure that the tunnel configuration uses a different source IP address from that of the NAS/LAC.

VSI_M Messages

The following are VSI master error messages.

Error Message

```
%VSI_M-3-INCOMPATVER: None of the VSI versions ([int]-[int]) for session [dec] on
[chars] can be used
```

Explanation The VSI master on the TSC and the VSI slaves on the controlled switch must use the same version of the VSI protocol. This error reports that the slave for the indicated session on the indicated control interface does not support a VSI version that is also supported by the VSI master

and all the other slaves. The session cannot be established until the VSI master and all the other slaves use the same version of the VSI protocol. This error indicates that the Cisco IOS software version running on the TSC is not compatible with the Cisco IOS software running on the controlled switch.

Recommended Action Determine which versions of Cisco IOS software are running on the TSC and the controlled switch, and upgrade the Cisco IOS software or firmware that is out of date.

Error Message

```
%VSI_M-2-XCONNFAIL: Cross-connect [chars]/[int]/[int] [chars] [chars]/[int]/[int]
failed unexpectedly
```

Explanation One or more cross-connects that were previously established by the TSC through the VSI have failed. The TVC of which this cross-connect was a part will no longer carry traffic end to end. The failure may be caused by an unexpected condition on the switch that the TSC controls, or it may be caused by a switch configuration error that happened while the switch was not in communication with the TSC, but before the TSC detected this lack of communication.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

VTSP Messages

The following are Voice Telephony SPI error messages.

Error Message

```
%VTSP-3-CAPABILITYMISMATCH: voice port [chars]: call connection id [[hex] [hex]
[hex] [hex]]
```

Explanation There was a capabilities mismatch between the two call legs. Capabilities are negotiated among the call legs for CODEC, VAD and FAX rate.

Recommended Action Ensure that the dial peer configuration is appropriate for the interface in question. Also ensure that the configuration on the interface is correct.

Error Message

```
%VTSP-3-DOCALLHISFAIL: vtsp_do_call_history: [chars]
```

Explanation An attempt to allocate or insert an active VTSP call record into the call history list has failed.

Recommended Action No action is required.

Error Message

```
%VTSP-3-DSPALARM: DSP ID [hex]: status=[hex] message=[hex] text=[chars]
```

Explanation The DSP has reported a fatal error. All calls on the DSP were dropped, and a DSP reload was attempted.

Recommended Action Verify that the DSP has reloaded properly by attempting to place a call on the affected voice port. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VTSP-3-DSP_TIMEOUT: DSP timeout on event [dec]: DSP ID=[hex]: [chars]
```

Explanation A timeout on the digital signal processor (DSP) response has occurred.

Recommended Action The DSP has been reset automatically. If the problem persists, contact your Cisco technical support representative.

Error Message

```
%VTSP-4-FSM_BAD_EVENT: Invalid FSM Input on channel [chars]: state=[chars]  
event=[dec]
```

Explanation An internal software error has occurred.

Recommended Action This indicates a software failure. Consider upgrading your system to the latest Cisco IOS software release in your release train to take advantage of recent fixes.

Error Message

```
%VTSP-3-FSM_ERROR: [chars]
```

Explanation An internal finite-state machine error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VTSP-3-MSGSNDFAIL: channel:[chars] DSP ID:[hex] Message ID:[hex]
```

Explanation A message could not be sent to the DSP. The call continued but may have experienced problems.

Recommended Action Verify that the DSP is still functioning properly by attempting to place a call on the affected voice port. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VTSP-3-NOEVENT: no free event structure available from [chars] for DSP message

Explanation There were no event structures remaining in the system pools to alert the router of a voice or signaling event.

Recommended Action Check that the voice port for which the event was reported is still operational. If the voice port was not operation, clear it.

Error Message

%VTSP-3-VTSP_BLOCK: vtsp_call_block allocate failed

Explanation A memory shortage has caused a call block allocation to fail.

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

Error Message

%VTSP-3-VTSP_CALL_DISC_FAILED: VTSP call disconnect failed. channel id [chars],
ret [dec]

Explanation A VTSP call disconnect could not be successfully passed, which may result in hung calls.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VTSP-3-VTSP_HAIRPIN_FAILED: Call hairpinning failed. cdb [hex], dst_cdb [hex],
dst_call_id [dec]

Explanation A call with no DSP could not be forwarded from the access server to another device. This failure may occur because no TDM resources are available and traffic is heavy.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%VTSP-3-VTSP_HAIRPINN: hairpin peer cdb does not exist, cdb [hex], dst_call_id
[dec]

Explanation A memory shortage has caused the RBTreeCreate process to fail.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%VTSP-3-VTSP_HAIRPIN_NOTPOSSIBLE: Call can't be hairpinned. cdb [hex], dst_cdb [hex], dst_call_id [dec]
```

Explanation A call with no DSP could not be forwarded to another device.
Check the dial-peer configuration.

Recommended Action

WCCP Messages

The following are WCCP error messages.

Error Message

```
%WCCP-5-CACHEFOUND: Web Cache [IP_address] acquired
```

Explanation The router has acquired the specified web cache service.

Recommended Action No action is required.

Error Message

```
%WCCP-1-CACHELOST: Web Cache [IP_address] lost
```

Explanation The router has lost contact with the specified web cache service.

Recommended Action Verify the operation of specified web cache service.

X25 Messages

The following are X.25 error messages.

Error Message

```
%X25-3-ADDRESSBAD: Interface [chars], x25 address [chars] subaddress [char] is too long
```

Explanation This message occurs when a subaddress is configured. When this subaddress is combined with the X.121 address of the interface, the total address exceeds the limit of 15 characters.

Recommended Action Reconfigure the subaddress so that this does not happen.

Error Message

%X25-3-BADCONFIG: Interface [chars], X.25 [chars], current config. retained

Explanation The X.25 configuration of the interface is not valid. The existing configuration was not changed.

Recommended Action Ensure that the switched virtual circuit ranges of the interface do not overlap; for nonzero values, lic <= hic < ltc <= htc < loc <= hoc. (For more information, refer to “Configuring X.25 and LAPB” in the *Cisco IOS Wide-Area Networking Configuration Guide*.) If an incoming-only range is defined, ensure 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

%X25-3-BADCONFIGATTEMPT: Attempt to [chars].

Explanation The user has attempted an illegal configuration.

Recommended Action The error will indicate what invalid action was attempted. Check your configuration, and if necessary, contact a Cisco technical support representative for assistance.

Error Message

%X25-4-BADMBIT: Interface [chars], VC [dec], partial data packet has M-bit set

Explanation A virtual circuit has been set up using the default maximum packet sizes, but the DTE and DCE are not configured with the same default values. A packet was received that had the M-bit set, signifying that more data follows, but the packet did not carry the maximum number of bytes allowed. Such partial data packets must have the M-bit cleared. The resulting loss of a message boundary might cause problems for the data recipient.

Recommended Action Verify the default flow control parameters of the DTE and the DCE. If this message recurs, contact your Cisco technical support representative for assistance.

Error Message

%X25-4-BADUPCALL: Interface [chars], Unexpected call ([chars]) from LLC2
DTE=[hex][hex].[hex][hex].[hex][hex].

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-3-COMPERR: Interface [chars] LCI [dec] low-level stac compression error

Explanation A stacker compression algorithm internal error or shortage of buffer space was encountered during a compression operation. This error should never happen.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-4-DEBUG_LCI: LCI deleted at interrupt time

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-3-ERR_SUBST_XOT_DNS_DEST: Error substituting regular expression for XOT DNS destination pattern

Explanation The regular expression substitute utility has failed to produce the X.25 host name pattern to be sent to the DNS for address resolution.

Recommended Action Correct the DNS substitution pattern that was specified in the **x.25 route** command.

Error Message

%X25-2-ILLP4: Interface [chars], Illegal state [chars] when P4

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-3-INTIMEQ: Interface [chars], LCN [dec] already in timer queue, new time [time-stamp]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-3-INVCFGID: [dec] is not a valid X.25 configuration ID

Explanation An invalid configuration ID has been used.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-4-LARGEPKSIZE: Interface [chars], [chars] packet sizes [dec]/[dec] too large; lower values will be negotiated

Explanation The default packet sizes or outgoing packet size facility values of the interface are too large to be carried by LAPB. The router will negotiate lower packet size values automatically.

Recommended Action Increase the LAPB N1 value. For example, for an X.25 maximum packet size of 1024 bytes, the modulo 8 X.25 operation will add 3 bytes of overhead, and the modulo 8 LAPB operation will add 4 bytes of overhead (the two bytes of CRC are defined to be included). Therefore, the LABP N1 value must be at least 8248 bytes (1031 bytes * 8 = 8248).

Error Message

%X25-3-LCIBOGUS: in x25_timer NULL lci_idb [hex]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-5-NOBUF: Interface [chars] LCI [dec] [chars]

Explanation A decompression buffer was not available for an incoming compressed packet. This message 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. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-3-NOLCI: Interface [chars], Delete: lci [dec] not found in [chars] table

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-3-NOTFINDBH: Can't find bfe host address [IP_address] to delete

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-4-PARTIALMAP: Interface [chars], [chars] encapsulation call from [chars] partially mapped to [chars]

Explanation An incoming X.25 call specified a protocol that was assigned to a multiprotocol map; the VC will not be able to carry the full set of protocols specified by the map.

Recommended Action Modify the configuration of the router or the far host to match the encapsulation method used.

Error Message

%X25-5-PBPDBIT: Interface [chars] LCI [dec] PBP Compression does not support X25 D bit

Explanation Compression is not enabled because D-bit support is configured for the LCI.

Recommended Action Reconfigure the interface without D-bit support, or do not attempt to run with compression.

Error Message

%X25-5-PBPHOLDQ: Interface [chars] LCI [dec] X25 Hold queue needs to be at least default size

Explanation An attempt was made to configure the X.25 hold queue to less than the minimum value of 10 packets.

Recommended Action Configure the X.25 hold queue to be 10 packets or more.

Error Message

%X25-5-PBPNOEND: Interface [chars] LCI [dec] End system not configured for X25 PBP

Explanation A compression or decompression operation was attempted by a router other than an end router. Only end routers can perform compression and decompression.

Recommended Action Reconfigure the routers so that only the end routers in the network perform compression and decompression.

Error Message

%X25-3-PROFILENO: profile [chars] does not exist

Explanation An X.25 interface has been configured to use an X.25 profile that does not exist.

Recommended Action Create and configure the X.25 profile by entering the **x25 profile name** global configuration command before referencing the profile.

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 within the output of the **show x25-vc** command. For more information, refer to the **show x25-vc** command documentation in the *Cisco IOS Wide-Area Networking Command Reference*.

Recommended Action Validate the configuration of the PVCs at both ends of the connection, and reconfigure them if necessary.

Error Message

%X25-4-RANGEUNUSED: Interface [chars], [chars] VC range unused; set limits to zero

Explanation An outdated method was used to specify a virtual circuit range. (An outgoing-only or incoming-only virtual circuit range exactly overlaps the two-way virtual circuit range.)

Recommended Action To specify a virtual circuit range, use the current method and set the range limits to zero. To write the configuration to memory, enter the **copy running-config startup-config** command in privileged configuration mode. Using the **copy running-config startup-config** command will store the modified (zero) range limits.

Error Message

%X25-3-SIZEBAD: Interface [chars] LCI [dec] Decompression size error

Explanation An internal software error has occurred. The PBP header has an uncompressed packet size field. Each uncompressed packet size is checked against this field.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-3-SPURD1: Interface [chars], Spurious D1 timer wakeup on LCI [dec]

Explanation An internal software error has occurred.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-3-SYNCBAD: Interface [chars] LCI [dec] Decompression sync error. expected [dec] got [dec]

Explanation An internal software error involving the PBP header has occurred. The PBP header has an 8-bit synchronization field that is checked on each received packet.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-3-TRUNCATE_ALT_XOT_DNS_DEST: Truncating excess XOT addresses ([dec]) returned by DNS

Explanation An X.25 route DNS lookup has returned more than the maximum number of permissible XOT destination addresses.

Recommended Action Review the DNS database entries used for XOT destination lookup and change the configuration so that no more than 6 XOT destination addresses exist.

Error Message

%X25-3-UNKNOWNPROT: [chars] : Unable to identify lower layer protocol

Explanation The IDB is not using X.25 and therefore cannot support the lower-level CMNS protocol.

Recommended Action Check your hardware configuration or contact your Cisco 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 not cleared completely. The last [chars] text string in the message can take one of two forms. If the text string is “closed unexpectedly,” the router at the remote end of the connection was rebooted, or the connection failed. If the text string is “connection corrupted,” it is likely that the connection was made to a router running an older Cisco IOS software release.

Recommended Action If the text string is “closed unexpectedly,” reestablish the connection after the remote router or intervening network becomes operational. If the text string is “connection corrupted,” upgrade to a more recent version of the Cisco IOS software for the router at the other end of the connection.

Error Message

```
%X25-3-VERSIONBAD: Interface [chars] LCI [dec] Compression Version mismatch  
expected [hex] received [hex]
```

Explanation An internal software error has occurred involving the PBP header. The PBP header has a mismatched version field. The version is checked on each received packet.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%X25-3-X25DEENCINV: [chars]
```

Explanation An X.25 service configuration is being removed.

Recommended Action If this was not a desired action, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%X25-3-X25ENCINV: [chars]
```

Explanation An X.25 service is being configured.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%X25-3-X25INT: Interface [chars], X.25 internal error [chars]
```

Explanation This is a general message that covers numerous internal X25 error conditions. The message text contains additional details that can be used to identify the problem.

Recommended Action This may be caused by a misconfiguration issue. Double-check your X25 configuration. If the message appeared after a Cisco IOS upgrade, try removing the X25 configuration and re-adding it. In addition, if the hold queue is congested, try increasing its value to 400.

Error Message

```
%X25-3-X25NOCFG: Profile is not configured
```

Explanation An X.25 interface is configured to use an X.25 profile that is not configured.

Recommended Action Configure the X.25 profile by entering the **x25 profile** *name* global configuration command before referencing the profile.

Error Message

%X25-3-X25NOTAVAIL: [chars] : Lower layer protocol is not available

Explanation The required lower-layer service is unavailable.

Recommended Action Check your configuration or contact your Cisco technical support representative for assistance.

Error Message

%X25-4-XOTHOSTWRONG: Wrong host ([IP_address]) for XOT connection to [chars] PVC [dec]; expecting [IP_address]

Explanation An incoming XOT connection has identified a PVC that is configured for a different host IP address and whose configuration does not permit connection to a different host.

Recommended Action If the host that is attempting the connection should be allowed, either the remote host should be configured to use a single host address (by adding the **xot-source type number** option and choosing **ifc** for the *type* and *number* argument) or the local PVC should be configured to accept connections from any host (by using the **xot-promiscuous** keyword). If the host that is attempting the connection is an unauthorized one, the network administrator should take the appropriate security measures to investigate the unauthorized host.

Error Message

%X25-3-XOTINT: XOT internal error [chars]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-3-XOTPROTOCOL: XOT protocol error from [IP_address]: [chars]

Explanation A protocol error involving an XOT connection has been detected. The connected VC has been closed. A flaw may exist in the XOT implementation of the remote host.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%X25-4-XOTPVCDUPLICATE: Duplicated remote PVC data for {[chars], pvc [dec]} and {[chars], pvc [dec]}

Explanation This message identifies two local XOT PVCs that are defined using duplicate specifications for the connecting remote XOT PVC.

Recommended Action The network administrator should examine the specified PVCs to determine what XOT PVC configuration is required.

XCCTSP_VOICE Messages

The following are External Call Control Telephony Service Provider error messages.

Error Message

```
%XCCTSP_VOICE-3-ADDINTRFFAIL: The Voice Telephony Service Provider has rejected our request to add this voice interface ([dec]/[dec]:[dec])
```

Explanation The voice software was unable to report a new signaling interface to the Voice Telephony Service Provider.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCCTSP_VOICE-3-MALLOC: No memory is available to build any internal data structure for the voice software.
```

Explanation The voice software was unable to allocate memory to build any internal data structures. The system may be out of memory.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCCTSP_VOICE-3-NOMEM: No memory is available to build the voice interface ([dec]:[dec])
```

Explanation The voice software was unable to allocate memory to build a voice interface data structure. The system may be out of memory.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCCTSP_VOICE-3-NOSDB: No signaling data block is available to build the voice interface([dec]/[dec]:[dec])
```

Explanation The voice software was unable to obtain a signaling data block from the Voice Telephony Service Provider. The system may be out of memory.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCCTSP_VOICE-3-NOTDMCHNL: XCCTSP failed to get a free dsp tdm channel from the DSP Resource Manager (DSPRM) to handle an incoming call
```

Explanation The voice software was unable to obtain the TDM channel for a free DSP from the DSP Resource Manager. All of the DSPs have been used to process calls or have been taken out of service.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCCTSP_VOICE-3-NOVOICEVDEV: Cannot find the voice data block which matches an asynchronous response for a call.
```

Explanation An internal software error has occurred.

Recommended Action Contact your field service representative if this message is coincident with dropped calls. If this message is not coincident with dropped calls, copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCCTSP_VOICE-3-UNDEFDSX0: Undefined dsx0 interface for controller([dec])
```

Explanation The voice software is using a dsx0 interface for the specified controller that has not been defined. An internal software error has occurred.

Recommended Action Contact your field service representative if this message is coincident with dropped calls. If this message is not coincident with dropped calls, copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCCTSP_VOICE-3-UNDEFVOICEINTRF: Invalid voice interface
slot/controller:group([dec]/[dec]:[dec])
```

Explanation The voice interface defined by **controller:group** keyword is not yet defined within the voice software, but attempts have been made to use this interface. An internal software error has occurred.

Recommended Action Contact your field service representative if this message is coincident with dropped calls. If this message is not coincident with dropped calls, copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

XCPA Messages

The following are Mainframe Channel Port Adapter error messages.

Error Message

```
%XCPA-3-BADHWVER: bay [[dec]] pre-production hardware version detected
(hw:[int].[int], [int].[int]).
```

Explanation The XCPA hardware major version is 0, which indicates that the hardware is preproduction. Port adapters having this hardware version were provided to EFT and beta customers. These port adapters should be upgraded.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%XCPA-3-BOOTCFG: bay [[dec]] unable to download boot configuration information.
```

Explanation After microcode was downloaded to the XCPA, an attempt was made to copy boot information into its memory. This operation has failed. The port adapter will be deactivated.

Recommended Action To reset the port adapter, you must enter the **microcode reload** command. If this error recurs, record the output from the following commands:

- **show tech**
- **dir slot0:**
- **dir slot1:**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-BOOTFAIL: bay [[dec]] [chars][chars]
```

Explanation The XCPA did not become operational after microcode was downloaded and the CPU has been taken out of reset. The message contains the reason for this error that was reported by the port adapter. The port adapter will be deactivated.

Recommended Action To reset the channel port adapter, you must enter the **microcode reload** command. If the error recurs, record the output from the following commands:

- **show tech**
- **dir slot0:**
- **dir slot1:**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-BOOTVER: bay [[dec]] incompatible microcode (boot version [int].[int] not within [int].[int] - [int].[int]).
```

Explanation An incompatibility exists between the version of the system image and the version of microcode.

Recommended Action To display the default and configured versions of microcode for this port adapter hardware type, enter the **show microcode** command. Ensure that the correct version of microcode exists in Flash memory. To load the microcode, enter the **microcode reload** command. If this error recurs, record the output from the following commands:

- **show tech**
- **show microcode**
- **dir slot0:**
- **dir slot1:**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-DEACTIVATED: bay [[dec]] deactivated
```

Explanation The XCPA is being deactivated because it has failed to successfully complete initialization. Other messages in the log will specify the exact cause of the failure.

Recommended Action If possible, correct any errors indicated by the other messages reported in the log at the time of this message. To reset the port adapter, you must enter the **microcode reload** command. If this error persists, ensure that the port adapter is properly seated in the bay. If the error still recurs, record the output from the following commands:

- **show tech**
- **dir slot0:**
- **dir slot1:**

- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-DMAERROR: bay [[dec]] dma error: [chars]
```

Explanation A DMA failure has occurred.

Recommended Action Reload the microcode by entering the **microcode reload** command. If the error persists, ensure that the XCPA is properly seated in the bay. If this error still recurs, record the output from the following commands:

- **show tech**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-DWNLDCKSM: bay [[dec]] checksum calculated [hex], expected [hex]
```

Explanation The calculated checksum of a section in the downloadable microcode file did not match the expected value.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCPA-3-DWNLDFAIL: bay [[dec]] download failed [chars] [chars]
```

Explanation The microcode download has failed for the reason specified in the message. The XCPA will be deactivated.

Recommended Action To reset the port adapter, you must enter the **microcode reload** command. If this error recurs, record the output from the following commands:

- **show tech**
- **dir slot0:**
- **dir slot1:**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-HWVER: bay [[dec]] incompatible microcode (hw:[int].[int], [int].[int]).
```

Explanation An incompatibility exists between the XCPA hardware and the version of microcode that the system image has attempted to load.

Recommended Action Use the **show microcode** command to display the default and configured versions of microcode for this port adapter hardware type. Ensure that the correct version of microcode exists in Flash. To load the microcode, use the **microcode reload** command. If this error still occurs, record the output from the following commands:

- **show tech**
- **show microcode**
- **dir slot0:**
- **dir slot1:**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-INITFAIL: bay [[dec]] initialization failed: [chars]
```

Explanation The XCPA driver has failed to successfully initialize the hardware on the port adapter. The port adapter will be deactivated.

Recommended Action To reset the port adapter, you must enter the **microcode reload** command. If this error persists, verify that the port adapter is properly seated in the bay. If the error still recurs, record the output from the following commands:

- **show tech**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-IPC: bay [[dec]] - [chars] (code=[dec])
```

Explanation An XCPA IPC error has occurred. The port adapter in the specified bay is unusable.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCPA-4-NOCLONEPARTICLES: bay [[dec]] clone particles added by xcpa [dec],  
number of clone particles expected to be added by xcpa [dec]
```

Explanation Particle clones could not be added.

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

Error Message

```
%XCPA-3-NOTANALYZED: bay [[dec]] analyze failed
```

Explanation The XCPA driver has failed to successfully complete the tasks necessary for the initial bringup of the port adapter. This error is usually caused by a shortage of memory. Previous messages in the log will report the exact reason for the failure. The port adapter will be deactivated.

Recommended Action To reset the port adapter, you must enter the **microcode reload** command. If this error persists, ensure that the port adapter is properly seated in the bay. If the error still recurs, record the output from the following commands:

- **show tech**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-NOTLOADED: bay [[dec]] port adapter download and reset failed
```

Explanation The microcode driver has failed to successfully complete the necessary tasks for downloading microcode to the XCPA and bringing its CPU out of reset. Previous messages in the log will indicate the exact reason for the failure. The port adapter will be deactivated.

Recommended Action To reset the port adapter, you must enter the **microcode reload** command. If this error persists, ensure that the port adapter is properly seated in the bay. If the error still recurs, record the output from the following commands:

- **show tech**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-NOTOPER: bay [[dec]] not operational after [dec] usecs; status=[hex]
```

Explanation After a microcode download, the XCPA did not send a message indicating that it was operational within the expected time limit. The port adapter will be deactivated.

Recommended Action To reactivate the port adapter and reload the microcode, you must enter the **microcode reload** command. If this error recurs, record the output from the following commands:

- **show tech**
- **dir slot0:**

- **dir slot1:**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-OUTHUNG: [chars] - output stuck - [chars]
```

Explanation A transmit queue of the XCPA contained packets that had been queued for an excessive period of time. A command requesting dump information will be sent to the port adapter and then the port adapter will be reset.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCPA-3-POWEREDOFF: bay [[dec]] powered off
```

Explanation The XCPA has been powered off. Other messages in the log will report the cause of this event.

Recommended Action If possible, correct any errors indicated by the other messages reported in the log at the time of this message. To reset the port adapter, enter the **microcode reload** command. If this error persists, ensure that the port adapter is properly seated in the bay. If the error still recurs, record the output from the following commands:

- **show tech**
- **dir slot0:**
- **dir slot1:**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-RXQ: [chars] - consistency error - [chars] ([hex],[dec])
```

Explanation A consistency check did not receive the specified packets that were sent by the XCPA. The packets are being dropped.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCPA-3-STATUS: bay [[dec]] [chars] (code=[dec])
```

Explanation The XCPA is reporting a condition that has affected the operational status of the card. This message contains the reason for the condition that was reported by the port adapter. The port adapter will be automatically restarted.

Recommended Action If the port adapter does not automatically restart after detecting the operation status error, enter the **microcode reload** command. Whether or not the port adapter can be restarted, report this status along with the output from the following commands:

- **show tech**
- **dir slot0:**
- **dir slot1:**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-SWITCH: Driver init failed - [chars] (bay=[dec])
```

Explanation The XCPA packet switch driver initialization has failed. The channel port adapter will not be usable.

Recommended Action Record the output from the following commands:

- **show tech-support**
- **show memory**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-UCODEHDR: bay [[dec]] skip=[hex] hdr_ver=[hex] fw_rev=[hex]  
req_hw_ver=[hex] hw_type=[hex]
```

Explanation The header information in the downloadable microcode file contains incorrect information. Other messages in the log specify what information is incorrect.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCPA-3-UCODEREAD: bay [[dec]] - error reading microcode file, read=[dec],
requested=[dec]
```

Explanation An error occurred while the XCPA was reading the microcode file. The port adapter will be deactivated.

Recommended Action To reactivate the port adapter and reload the microcode, enter the **microcode reload** command. If this error recurs, record the output from the following commands:

- **show tech**
- **dir slot0:**
- **dir slot1:**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

```
%XCPA-3-UCODESEC: bay [[dec]] wcs=[hex] addr=[hex] len=[hex] ep=[hex] compr=[hex]
sec_type=[hex] ver=[hex]
```

Explanation The header information in a section of the downloadable microcode file contains incorrect information. Other messages in the log will identify the incorrect information.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%XCPA-3-UNEXPECTEDINT: cause_lo=[hex], cause_hi=[hex], mask=[hex],
addr_dec_err=[hex], bus_err=[hex], ch0_ctrl=[hex]
```

Explanation An unexpected interrupt has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%XCPA-3-VPLDVER: bay [[dec]] incompatible microcode (vpld version [int].[int] not within [int].[int] - [int].[int]).

Explanation An incompatibility exists between the version of the system image and the version of the microcode.

Recommended Action Use the **show microcode** command to display the default and configured versions of microcode for this port adapter hardware type. Ensure that the correct version of microcode exists in Flash. Use the **microcode reload** command to load the microcode. If this error recurs, record the output from the following commands:

- **show tech**
- **show microcode**
- **dir slot0:**
- **dir slot1:**
- **show log**

Provide this information to your Cisco technical support representative.

Error Message

%XCPA-3-XCPADRIVERKILL: Unexpected request to terminate: XCPA driver process ([chars])

Explanation An unexpected termination of the XCPA driver process has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

XTAGATM Messages

The following are XTagATM error messages.

Error Message

%XTAGATM-3-CONSISTENCY: [chars]

Explanation An action attempted by the XTagATM interface implementation has encountered an unexpected condition.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%XTAGATM-3-CONTROLVC: [chars]; could not create the control VC; reason [chars]

Explanation The XTagATM driver was unable to create the tag switching control VC. This error may be the result of a configuration problem or of an unexpected condition within the XTagATM driver. A TDP session cannot be established on this interface without the tag switching control VC.

Recommended Action To check for a configuration problem, ensure that the VPI and VCI values for the tag control VC lie within the range supported on the controlled switch interface that is associated with the XTagATM interface (by using the **extended-port** command in interface configuration mode). If the configuration is correct, the problem may be caused by an unexpected condition within the XTagATM driver. In this case, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%XTAGATM-3-CTLVCPVI: [chars]; VPI for control VC must be 0 or within configured range on switch

Explanation An incorrect VPI value for the tag control VC has been entered. The VPI value for the tag control VC, set by entering the **tag-switching atm vpi** command in interface configuration mode, either must be 0 or must lie within the range of VPI values that is configured for tag switching on the controlled ATM switch. If the VPI value for the tag switching control VC is outside the appropriate range of values, the tag control VC will not be created, and the TDP session will not be established on the XTagATM interface.

Recommended Action Either reconfigure the VPI value for the tag switching control VC using the **tag-switching atm vpi** command in interface configurational mode for the TSC or reconfigure the range of VPI values available for tag switching on the controlled ATM switch. Make sure that the VPI value specified for the tag control VC is either 0 or a value that is within the configured range of VPI values available for tag switching on the controlled ATM switch.

Error Message

%XTAGATM-3-DUPEXTPORT: [chars]; mapped to the same switch interface as [chars]

Explanation Two XTagATM interfaces have been associated with a single interface, creating a duplicate binding on the controlled ATM switch. The duplicate binding will cause one of the XTagATM interfaces to remain down indefinitely.

Recommended Action To remove the duplicate binding, enter the **extended-port** interface configuration command on one of the XTagATM interfaces.

Error Message

%XTAGATM-4-NEWVCINRANGE: VC created on [chars] in range reserved for TSC (VPIs [int]-[int], VCIs [int]-[int])

Explanation A VC whose VPI or VCI is in the range configured for use by the TSC on the TSC-controlled ATM switch was just created. The TSC will be unable to create a VC with that VPI or VCI, and no data will be transmitted or received on the associated XTagATM TVC. The new VC may be on either the primary interface or a subinterface.

Recommended Action Reconfigure the new VC so that it does not fall into the range reserved for the TSC, or reconfigure the VPI/VCI range on the TSC-controlled ATM switch so that it excludes the VPI/VCI of the new VC.

Error Message

%XTAGATM-4-OLDVCINRANGE: VC exists on [chars] in range reserved for TSC (VPIs [int]-[int], VCIs [int]-[int])

Explanation An existing VC has a VPI or VCI that is in the range configured for use by the TSC on the TSC-controlled ATM switch. The TSC will be unable to create a VC with that VPI/VCI, and no data will be transmitted or received on the associated XTagATM TVC. The existing VC may be on either the primary interface or a subinterface. This message is issued only once, even if there are multiple existing VCs in the reserved range.

Recommended Action Reconfigure the existing VCs so that they do not fall into the range reserved for the TSC, or reconfigure the VPI/VCI range on the controlled switch so that it excludes the VPI/VCIs of existing VCs.

Error Message

%XTAGATM-3-SWITCHVPI: [chars]; switch VPI range ([dec]-[dec]) outside usable range ([dec]-[dec])

Explanation The VPI range that has been configured for tag switching on the TSC-controlled ATM switch does not overlap the range of VPI values that the TSC can support. This error will prevent a TDP session from being established on this interface.

Recommended Action Reconfigure the VPI range on the controlled switch so that it overlaps the range of VPI values that the TSC can support.



CMCC System Error Messages

The system can report error conditions in numerous facility codes related to the Cisco Mainframe Channel Connection (CMCC) product family. The CMCC product family includes the Channel Interface Processor (CIP) and the Channel Port Adapter (CPA). The format of CMCC error messages differs from the format of other system error messages.

The format for CMCC error messages parallels the format for other system error messages; however, CMCC error messages also indicate the card and slot reporting the error. CMCC error messages begin with a percent sign (%) and are structured as follows:

```
%CARD-SEVERITY-MSG: SLOT %FACILITY-SEVERITY-MNEMONIC: Message-text
```

CARD is a code that describes the type of card reporting the error. CIP, CIP2, ECPA, ECPA4, and PCPA are possible card types.

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 5](#) lists the severity levels.

MSG is a mnemonic that indicates that this is an error message. It is always shown as **MSG**.

SLOT indicates the slot number of the card reporting the error. It is shown as **SLOT** followed by a number (for example, **SLOT5**).

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 hardware device, a protocol, or a module of the system software. [Table 6](#) lists the CMCC facility codes.

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 7](#) lists the representations of variable fields and the type of information in them.

The format of non-CMCC error messages is discussed in the chapter “About this Manual” at the beginning of this book.

The following is a sample CMCC error message:

```
%ECPA-6-MSG:slot5 %SYSMGT_RPC-6-STATE_CHANGE: System Management [chars]
```

Table 5 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 |

Table 6 CMCC Facility Codes

| Code | Facility |
|------------|---|
| ADAPTER | Adapter task |
| BSQ | Buffer status queue processing |
| CBUS_ATTEN | ciscoBus controller statistics |
| CBUS_WRITE | ciscoBus controller write support |
| CCA | Channel card adapter processing |
| CIOS | Channel adapter Cisco IOS wrapper |
| CIP | Channel Processor Card |
| CIP2 | Enhanced Channel Processor Card |
| CLAW | Common Link Access for Workstations (CLAW) |
| CMPCTG | Logical Link Control (LLC) Transmission Group |
| CONFIG | Configuration processing |
| CTA | Channel transport architecture device task/mapper |
| DEBUGGER | Messages issued when nonrecoverable errors occur |
| DIAG | Diagnostic testing |
| DMA | Direct memory access (DMA) |
| ECPA | Escon Channel Port Adapter |
| ECPA4 | Enhanced Escon Channel Port Adapter |
| GET_DATA | Internal routine for allocating transfer elements |
| GT64011 | Channel port adapter GT64011 |
| INT | Interrupt handler interface |
| IPC | Interprocess communication (IPC) subfacility |
| IPC_DRVR | Interprocess communication (IPC) driver |
| IPP | Encryption feature |
| LOADER | Relocating loader |

Table 6 *CMCC Facility Codes (continued)*

| Code | Facility |
|--------------|---|
| LOVE | Channel Interface Processor (CIP)-to-router statistics |
| MBUF | Memory buffer |
| MEMD | Memory device |
| MPC | Multipath Channel (MPC) protocol |
| MSG802 | IEEE 802.2cx Logical Link Control (LLC) protocol stack |
| NEVADA | Interrupt controller |
| OFFL | Offload protocol |
| PACK | Packed extension to the Common Link Access Workstation (CLAW) |
| PCPA | Parallel Channel Port Adapter |
| PKTS | Packet-switching Application Programming Interface (API) |
| SCB | Storage control block |
| SCHED | Multitasking scheduler |
| SLC | Serial link controller |
| SLCI | Signaling Link Code Interface (SLCI) |
| SSI802 | Common Service System Service Interface (SSI) |
| SUBSYS | Software subsystem |
| SYS | Channel Interface Processor (CIP) operating system |
| SYSMGT_EVENT | Network management processing for system management event generation |
| SYSMGT_RPC | Network management processing for system management remote-procedure call (RPC) operation |
| TCPIP | TCP/IP protocol |
| TN3270S | TN3270 server terminal emulation |
| UTIL | Channel adapter utilities |
| XCPA | Channel port adapter |

Table 7 *Representation of Variable Fields in Error Messages*

| Representation | Type of Information |
|-----------------------|--|
| [atalk_address] | AppleTalk address |
| [atalk_net] | AppleTalk network, either 600 or 600-601 |
| [char] | Single character |
| [chars] | Character string |
| [dec] | Decimal number |
| [enet] | Ethernet address (for example, 0000.FEED.00C0) |
| [hex] | Hexadecimal number |
| [inet] | Internet address (for example, 10.128.2.16) |
| [int] | Integer |

Table 7 *Representation of Variable Fields in Error Messages (continued)*

| Representation | Type of Information |
|-----------------------|--|
| [node] | Address or node name |
| [sci_notation] | Scientific notation |
| [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) |

The CMCC error messages are organized alphabetically into sections by facility, and within each facility section, messages are listed alphabetically by mnemonic. Each error message is followed by an explanation and a recommended action.

**Note**

The prepended portion of the error message (%CARD-SEVERITY-MSG: SLOT) is not shown in the error message listings in this manual.

CMCC ADAPTER Messages

The following are Channel Interface Processor (CIP) error messages for the adapter task.

Error Message

`%ADAPTER-6-BADREQUEST: Bad request code [dec] generated on port [dec]`

Explanation A request was sent to the function that handles general requests for the specified port. The request code was not in a range recognized by that function.

Recommended Action The CIP has recovered by ignoring the request. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%ADAPTER-6-BADSTATE: Bad state: port [dec], request code [dec], state [dec], flags [hex]`

Explanation The specified port was in an invalid state while it was attempting to process the specified general request.

Recommended Action The CIP recovered by forcing the port into a valid state. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

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 informs 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. The indicated codes are used to locate the specific component that failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

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. The indicated codes are used to locate the specific component that failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

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 Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

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

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

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

Recommended Action No action is required.

Error Message

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

Explanation The diagnostic number requested by the **test cbus** command is invalid.

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. The interface must be shut down before the diagnostic is run.

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 end when expected. The specified port will not be used.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation A diagnostic requested by the **test cbus** command did not end when expected.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

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 has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation An error has occurred in the adapter. The information displayed will help software developers determine the nature of the error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%ADAPTER-6-LOGOUT: Port [dec] logout data. Adapter microcode [hex]

Explanation This message indicates the start of the logout data. Logout data occurs whenever a problem is detected on the port adapter or, with an ECA, on the fiber.

Recommended Action If this message is being continually generated on a new installation, it may indicate that the fiber is not connected properly. Verify that the connector is firmly seated. If a loose fiber was not the cause of these messages, report this message to your Cisco technical support representative.

Error Message

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

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

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%ADAPTER-6-NO_CHAN_EV_BUF: No channel event buffer: Daughter board [dec]

Explanation Channel link incident events are being dropped by the channel adapter because of an overflow of incidents.

Recommended Action Use SNMP to poll the CIP for the current LIR counts.

Error Message

%ADAPTER-6-NO_CHAN_EV_POOL: Could not allocate channel event pool

Explanation There is insufficient memory on the channel adapter to allocate buffers used for generating channel adapter events. Unless the memory is increased, no channel link incident events (SNMP traps) will be generated.

Recommended Action Add more memory to the channel adapter.

Error Message

%ADAPTER-6-SCAN: Port [dec] scan data. Adapter microcode [hex]

Explanation This message precedes the "SCANDATA" error message 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, including the "SCANDATA" error message that follows it, to your Cisco technical support representative.

Error Message

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

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

Recommended Action Report the entire error message, including the preceding “SCAN” error message, to your Cisco technical support representative.

Error Message

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

Explanation Prior to receipt by the adapter of 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 Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

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 wrap plug is removed, if this is the only adapter, or until 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 end.

Recommended Action No action is required.

Error Message

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

Explanation The wrap diagnostics have ended 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.

CMCC BSQ Messages

The following are buffer status queue processing error messages.

Error Message

%BSQ-0-INCMPLT_XFER: Incomplete Data Transfer received for non-read operation

Explanation An Incomplete Data Transfer Notice was received for a CCW that did not perform a read or that has read data backward. This is a fatal internal logic error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%BSQ-0-MTC_CHAIN: Incomplete More-To-Come chain queued

Explanation The CIP could not find the end of a more-to-come chain. This is a fatal internal logic error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%BSQ-0-NULLREAD: Unexpected read of zero bytes, BSQ=[hex] [hex] [hex] [hex]

Explanation The CIP was notified that an I/O operation has been completed with a storage control block that had a length of 0.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

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 Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

CMCC CBUS_ATTN Messages

The following are Channel Interface Processor (CIP) error messages relating to the ciscoBus controller statistics routine, the facility that receives configuration requests and gathers statistics.

Error Message

`%CBUS_ATTN-3-BADADDR: Bad memory address ([hex]) requested`

Explanation The RP requested that the CIP store a configuration command at an invalid memory address. The CIP has ignored the request.

Recommended Action Check if there were any special events that coincided with this error message. Pay particular attention to any unusual output from **show**, **debug**, or configuration commands. If this message occurs repeatedly, issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, call your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%CBUS_ATTN-3-DUMPUCODE: Dump of the CIP microcode has been requested`

Explanation An “output stuck” condition has been detected by the Cisco IOS software. When this error occurs, it means that a CIP software problem has occurred, such as a loop that prevents messages destined for the CIP from being processed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, call your Cisco technical support representative, and provide the representative with the gathered information.

CMCC CBUS_WRITE Messages

The following are Channel Interface Processor (CIP) error messages for ciscoBus controller write support. The ciscoBus controller write feature is used by the enhanced online insertion and removal (EOIR) support on the CIP to track write operations to the memory device and reissue them if a ciscoBus 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 logic error. The CIP recovered by ignoring the entry.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, call your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

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

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, call your Cisco technical support representative, and provide the representative with the gathered information.

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 logic error. The CIP recovered by ignoring the write error.

Recommended Action This error message is followed by a number of CBUS_WRITE-STACK messages. Copy the error messages exactly as they appear on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, call your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation This is a debugging display from the CBUS write stack and is associated with the CBUS_WRITE-3-MISSING error message.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, call your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation A write operation to an address other than the memory device (MEMD) has timed out. This is probably a hardware problem. The CIP failed and attempted to restart. The CIP will probably have to be replaced.

Recommended Action The CIP might need to be replaced. Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, call your Cisco technical support representative, and provide the representative with the gathered information.

CMCC CCA Messages

The following are Channel Interface Processor (CIP) error messages for channel card adapter processing.

Error Message

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

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

Recommended Action Normal processing will resume, but the software developers should be notified that this message has occurred. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

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

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation The adapter has notified the CIP that the buffer status queue is 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 Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation A user has attempted to start the PCA with the select bypass switch in the BYPASS position. The PCA cannot go online 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 has notified the CIP that a halt subchannel command was issued by the host, but has provided the CIP with an undefined type of cancel.

Recommended Action The CIP will recover, but the software developers should be notified of this problem. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

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

Recommended Action The CIP software recovered, but the software developers should be notified of this problem. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

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

Recommended Action The CIP software recovered, but the software developers should be notified of this problem. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

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

Recommended Action The CIP software recovered, but the software developers should be notified of this problem. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

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 in this message is not defined. This is a fatal internal logic error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

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 Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

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

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%CCA-3-DEV_ERR4: Control Unit Busy timer wasn't started for device [hex][hex]

Explanation During a device-level error, the "control unit busy" statistic was not updated because the timer was never started.

Recommended Action The CIP has recovered, but the software developers should be notified of this problem. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation The adapter has 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 recovered, but the software developers should be notified of this problem. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation The adapter has 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 recovered, but the software developers should be notified of this problem. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation The adapter has requested that the CIP present the status of an undefined path. This is an internal logic error.

Recommended Action The CIP has recovered, but the software developers should be notified of this problem. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

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 recovered, but the software developers should be notified of this problem. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation The adapter requested that the CIP 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 recovered, but the software developers should be notified of this problem. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation The adapter requested that the CIP reset a logical path for a path that is currently undefined.

Recommended Action The CIP has recovered, but the software developers should be notified of this problem. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation The CIP has been 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 Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation The adapter has 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 recovered, but the software developers should be notified of this problem. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

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 recovered, but the software developers should be notified of this problem. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

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 recovered, but the software developers should be notified of this problem. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%CCA-3-STATUS_NOTICE2: Control Unit Busy timer wasn't started for device  
[hex][hex]
```

Explanation During status presentation, the “control unit busy” statistic was not updated because the timer was never started.

Recommended Action The CIP has recovered, but the software developers should be notified of this problem. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

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

Explanation The adapter has 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 recovered, but the software developers should be notified of this problem. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%CCA-0-TOOMANY: Too many buffers ([dec]) required for a write operation.
```

Explanation The mainframe has written data to the CIP, and the number of buffers required to hold all the data being written was more than the total number of buffers allocated on the CIP for that purpose. This is a fatal error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

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 cannot be used unless it is 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 an operation. When the CIP tried to present the response to the request, it was not able to write to the common communication area. This is a fatal internal logic error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

CMCC CIOS Messages

The following are channel adapter Cisco IOS wrapper error messages.

Error Message

`%CIOS-3-BADPAK: pak=[hex], size=[dec]`

Explanation An internal software error occurred while messages were being generated by the channel adapter. This message indicates that a buffer has been corrupted.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%CIOS-3-BADREFCNT: pak=[hex], size=[dec]`

Explanation An internal software error occurred while messages were being generated by the channel adapter. This message indicates that a buffer has been freed twice.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%CIOS-2-BUGINF: Message too big([int])`

Explanation An internal software error occurred while debug messages were being generated by the channel adapter.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, call your Cisco technical support representative, and provide the representative with the gathered information. Turn off IPC debugging on the channel adapter until this condition can be fixed.

Error Message

```
%CIOS-3-CHUNKFREE: [chars] - chunk=[hex] name=[chars] ([hex])
```

Explanation An internal software error occurred while messages were being generated by the channel adapter.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, call your Cisco technical support representative, and provide the representative with the gathered information. Turn off IPC debugging on the channel adapter until this condition can be fixed.

Error Message

```
%CIOS-3-CONSISTENCY: [chars] - [chars]([hex])
```

Explanation An internal software error occurred while debug messages were being generated by the channel adapter.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, call your Cisco technical support representative, and provide the representative with the gathered information. Turn off IPC debugging on the channel adapter until this condition can be fixed.

Error Message

```
%CIOS-3-MGD_TMR: mgd_timer[chars] not set
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, call your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%CIOS-3-NOMEM: Not enough memory to allocate [chars]
```

Explanation The channel adapter is not equipped with enough memory to accommodate all the configured channel adapter features. The channel adapter may be rendered inoperable, or certain features may not work properly.

Recommended Action Upgrade the channel adapter with more memory.

Error Message

```
%CIOS-3-PROC: process [chars]([int])
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, call your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%CIOS-3-TIMERNEG: Cannot start timer ([hex]) with negative offset ([int]).
```

Explanation An attempt was made to start the timer with a negative offset. The timer cannot be started with a negative offset.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, call your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%CIOS-3-WI: [chars] - process [chars]([int])
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, call your Cisco technical support representative, and provide the representative with the gathered information.

CMCC CIP and CIP2 Messages

The Channel Interface Processor (CIP) and the enhanced CIP messages have the same initial message string and cannot be found in the same way as other Cisco IOS software System Error Messages. Perform the following steps to find the Explanation and Recommended Action for the CIP messages.

-
- Step 1** Find the message that immediately follows the CIP message. This message is inline with the CIP message and is preceded by a percent (%) sign.
- For example, if the error message on the console or in the system log is
- ```
%CIP2-4-MSG: slot5 %OFFL-4-BADDESC: Socket descriptor,
```
- make a note of the message %OFFL-4-BADDESC.
- If the error message is %CIP2-3-MSG: slot3 %MEMD-3-FRAME\_DATA2, make a note of the message %MEMD-3-FRAME\_DATA2.
- Step 2** Find the message in the CMCC message section of the Cisco IOS software System Error Messages. For the examples in [Step 1](#), find the messages %OFFL-4-BADDESC and %MEMD-3-FRAME\_DATA2, respectively.
- Step 3** Read the Explanation and Recommended Action for the message for additional information about the error.

**Note**

The number in the CIP error message (the x in %CIP-x-MSG) denotes the slot of the CIP adapter in the RSP chassis.



# CMCC CLAW Messages

The following Channel Interface Processor (CIP) error messages are related to the Common Link Access for Workstations (CLAW) facility.

## Error Message

```
%CLAW-0-BADAPPL: [dec]/[hex][hex][hex]/[hex]: Host Appl. names "[chars]" - "[chars]" do not match.
```

**Explanation** An attempt was made to establish a connection, but the application names specified on the host do not match any of the application names specified in the router configuration.

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

## Error Message

```
%CLAW-0-BADAPPL2: Configured names: "[chars]" - "[chars]"
```

**Explanation** An attempt was made to establish a connection, but the application names specified on the host do not match any of the application names specified in the router configuration.

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

## Error Message

```
%CLAW-6-BADCHAIN: Too many buffers in an IP Datagram write chain.
```

**Explanation** All the data sent in an IP datagram should fit into one transfer list element. The specified message required more than one.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, call your Cisco technical support representative, and provide the representative with the gathered information.

## Error Message

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

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

**Recommended Action** Correct the host and router configurations.

**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 those that the CMCC is designed to send.

**Recommended Action** The CMCC has notified the host of the problem. Reconfigure the frame size on the host to be 4096 or larger.

**Error Message**

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

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

**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 CMCC.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, call your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

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

**Explanation** During the system validation 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 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 CMCC than the CMCC is designed to receive.

**Recommended Action** The CMCC has notified the host of the problem. 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 has sent a CLAW command that has an invalid CLAW command code.

**Recommended Action** The CMCC has recovered by ignoring the request. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CLAW-0-DELFAILED: Tree deletion failed but entry was found, key=[hex].

**Explanation** When running with IP host backup enabled, the application that owns the IP address is stored in a tree. When the application that owns the IP address is done with the IP address, the owner removes itself from the tree. Before the owner removes itself, a check is made to see if it exists. The owner did exist, but the delete request failed.

**Recommended Action** This is a fatal internal logic error. The CIP microcode has been reinitialized. If this error persists, stop using the IP Host Backup feature until the problem can be corrected.

**Error Message**

%CLAW-3-DELNOTHERE: Tree deletion requested but entry does not exist, requestor=[hex]01x[hex] [hex].

**Explanation** When running with IP host backup enabled, the application that owns the IP address is stored in a tree. When the application that owns the IP address is done with the IP address, the owner removes itself from the tree. Before the owner removes itself, a check is made to see if it exists. The owner did exist, but the delete request failed.

**Recommended Action** This is an internal logic error. It may prevent IP Host Backup from working properly. If this error persists, stop using the IP Host Backup feature until the problem can be corrected.

**Error Message**

%CLAW-3-DELNOTME: Tree deletion requested but entry not owned, requestor=[hex]01x[hex] [hex], owner=[hex][hex][hex] [hex].

**Explanation** When running with IP host backup enabled, the application that owns the IP address is stored in a tree. When the application that owns the IP address is done with the IP address, the owner removes itself from the tree. Before the owner removes itself, a check is made to see if it exists. The owner did exist, but the delete request failed.

**Recommended Action** This is an internal logic error. It may prevent IP Host Backup from working properly. If this error persists, stop using the IP Host Backup feature until the problem can be corrected.

**Error Message**

%CLAW-0-DUPMISSING: Tree insertion failed but duplicate entry not found, key=[hex].

**Explanation** When running with IP Host Backup enabled, the application that owns the IP address is stored in a tree. When an attempt is made to claim the IP address, the application is inserted into the tree. If the insert fails, the tree is searched to find the owner of the application so that an appropriate error message can be issued. If the search fails, this message is issued to indicate that the tree is corrupted.

**Recommended Action** This is a fatal internal logic error. The CIP microcode has been reinitialized. If this error persists, stop using the IP Host Backup feature until the problem can be corrected.

**Error Message**

%CLAW-6-INVALIDLINK: Invalid CLAW link [dec] specified for option [dec]

**Explanation** The host has sent a CLAW option request command for an invalid link.

**Recommended Action** The CMCC has recovered by ignoring the request. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CLAW-3-IPINUSE: Device [hex][hex][hex] [hex] requested IP address [dec].[dec].[dec].[dec] already in use by device [hex][hex][hex] [hex].

**Explanation** When running in IP Host Backup mode, the first device listed attempted to establish a CLAW connection to use the specified IP address. The IP address is already in use by the second device.

**Recommended Action** If the second CLAW device is the desired owner of the IP address, then stop the first CLAW device and restart the second CLAW device. If not, stop the second CLAW device.

**Error Message**

%CLAW-6-LINKEXISTS: An attempt was made to redefine application [chars] [chars], application already defined.

**Explanation** The host has sent a CLAW option request to define an application that already exists.

**Recommended Action** The CMCC has recovered by ignoring the request. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CLAW-6-LONGREC: Attempt to transmit too large a record.

**Explanation** The amount of data being read by the channel has exceeded the size of the CCW that was read.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

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

**Recommended Action** The packet was dropped. Report this error to your Cisco 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. This error should not occur.

**Recommended Action** The CMCC has recovered by generating a bad return code to the requester. Report this error to your Cisco technical support representative.

**Error Message**

%CLAW-3-NOMEM: Not enough memory for host write.

**Explanation** Not enough free memory is available for the CLAW task to replenish the channel buffers after getting a write buffer.

**Recommended Action** Install more memory for the CMCC or configure fewer devices.

**Error Message**

%CLAW-3-NOSYSVAL: Device [hex][hex][hex] [hex] connection request "[chars]"  
"[chars]" without system validate

**Explanation** The CLAW connection request sequence was attempted without successful completion of a system validation sequence. This is a CLAW protocol error.

**Recommended Action** Restart the host application and the CMCC application. If this problem persists, contact your Cisco technical support representative.

**Error Message**

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

**Explanation** The host software attempted to disconnect a link that had not been established.

**Recommended Action** The CMCC has ignored the request. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**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.

**Recommended Action** The packet has been dropped. Report this error to your Cisco technical support representative.

**Error Message**

%CLAW-6-OPTION: Unrecognized CLAW option request code [dec]

**Explanation** The host has sent an unknown CLAW option request command.

**Recommended Action** The CMCC has recovered by ignoring the request. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

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

**Explanation** The link ID in a disconnect message is not within the valid range for all CLAW links.

**Recommended Action** The CMCC has recovered by ignoring the request. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CLAW-6-SCBTYPE: Unrecognized SCB type code [dec]

**Explanation** Each SCB pointing to data for the host is classified as a particular type before being queued to the host. After sending a block of data, the CLAW application detected an invalid type defining the data. This is an internal logic error.

**Recommended Action** The CMCC has recovered by ignoring the transfer. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CLAW-0-SYSMGT\_ERROR1: CLAW detected error in sysmgt call: invalid type [dec]

**Explanation** An invalid parameter was received in a system management call.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CLAW-6-TOOBIG: [dec] byte IP datagram exceeds CLAW MTU for device  
[dec]/[hex][hex][hex]/[hex]

**Explanation** The router has sent an IP datagram to the CMCC that is larger than the MTU for the CMCC. The MTU for the CLAW connection is set on the DEVICE statement for the CLAW device in the host TCPIP configuration file (PROFILE.TCPIP). The IP datagram has been dropped.

**Recommended Action** Check the configured IP MTU on the CMCC, and check the host configuration file. If the configurations are correct, report this problem to your Cisco technical support representative.

**Error Message**

%CLAW-6-TOOSMALL: [dec] byte IP datagram is too small, device  
[dec]/[hex][hex][hex]/[hex]

**Explanation** The router has sent an IP datagram to the CIP that is smaller than an IP header. The packet has been dropped.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**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.

**Recommended Action** The CMCC has recovered by ignoring the transfer. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**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.

**Recommended Action** The CMCC has recovered by ignoring the transfer element. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CLAW-6-VIRTCLAW: CLAW device may not be created on a virtual port adapter.

**Explanation** An attempt was made to configure a CLAW device on the virtual port adapter. CLAW devices are permitted only on real port adapters. The configuration request was ignored.

**Recommended Action** Configure the CLAW device on a real port adapter.

**Error Message**

%CLAW-6-WRITEREAD: Host Wrote data on read subchannel.

**Explanation** The mainframe has written data to the read subchannel. This error is most likely the result of a misconfiguration under a VM guest in which the write device is attached to the read subchannel.

**Recommended Action** Check the device definitions on the host and, if the host is running under VM, verify that the write device is attached to the write subchannel and the read device is attached to the read subchannel.

## CMCC CMPCTG Messages

The following are Logical Link Control (LLC) Transmission Group (TG) error messages.

**Error Message**

%CMPCTG-6-ACTIVE: CMPC-TG [chars] ACTIVE

**Explanation** The CMPC TG is in the active state.

**Recommended Action** No action is required.

**Error Message**

%CMPCTG-3-BAD\_XID3\_LEN: Xid3 CV length exceeds Msg Length

**Explanation** The length values in Xid3 Control Vectors have exceeded the length field in the Xid3 message. The contents of the Xid3 follow immediately.

**Recommended Action** No action is required.

**Error Message**

%CMPCTG-3-CFG\_ERR: TG [chars] configured with invalid Loop Back Sap

**Explanation** A loopback TG has been configured using the same local and remote SAP values. For loopback configurations, the local and remote SAPs should be different.

**Recommended Action** Change one of the SAP values.



**Error Message**

%CMPCTG-3-CFG\_FSM\_ERR: TG Name: [chars], Event [chars], State [chars]

**Explanation** An internal state machine has attempted to execute an event inconsistent with the state.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CMPCTG-6-INB\_SENSE: CMPC-TG [chars] Inbound Sense [hex]

**Explanation** This is an informative message given when a CMPC TG notices a cv22 with sense data. It indicates that an endpoint of the APPN session has detected a protocol problem.

**Recommended Action** No action on this router is required. Check the log for each of the two endpoints and take appropriate action.

**Error Message**

%CMPCTG-6-INIT: CMPC-TG [chars] initialized

**Explanation** A CMPC TG has noticed a cv22 with sense data. This message indicates that an endpoint of the APPN session has detected a protocol problem.

**Recommended Action** No action is required.

**Error Message**

%CMPCTG-3-LS\_FSM\_ERR: TG Name: [chars], Event [chars], State [chars]

**Explanation** An internal state machine has attempted to execute an event inconsistent with the state.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CMPCTG-0-NOADAP: CMPC-TG [chars] attempt to open adapter failed, pc: [hex]

**Explanation** An attempt by CMPC TG to open the LLC adapter has failed.

**Recommended Action** Make sure that the LLC adapter referenced by this TG is configured.

**Error Message**

%CMPCTG-0-NOMEM: CMPC-TG [chars] attempt to acquire memory failed, pc: [hex], at [int]

**Explanation** A call to create a pool or get a buffer has failed.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CMPCTG-6-NOTACTIVE: CMPC-TG [chars] NOT ACTIVE

**Explanation** A CMPC TG is no longer in the active state.

**Recommended Action** No action is required.

**Error Message**

%CMPCTG-6-OUTB\_SENSE: CMPC-TG [chars] Outbound Sense [hex]

**Explanation** A CMPC TG has noticed a cv22 with sense data. This message indicates that an endpoint of the APPN session has detected a protocol problem.

**Recommended Action** No action on this router is required. Check the log for each of the two endpoints and take appropriate action.

**Error Message**

%CMPCTG-6-REMOVED: CMPC-TG [chars] removed

**Explanation** A CMPC TG has been removed.

**Recommended Action** No action is required.

**Error Message**

%CMPCTG-0-SYSMGT\_ERROR3: Llc-Tg detected error in sysmgt call: invalid operation [dec]

**Explanation** An invalid parameter has been received in a system management call.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%CMPCTG-0-SYSMGT_ERROR4: Llc-Tg detected error in sysmgt call: invalid length
```

**Explanation** An invalid parameter has been received in a system management call.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## CMCC CONFIG Messages

The following are Channel Interface Processor (CIP) error messages that relate to the configuration processing facility.

**Error Message**

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

**Explanation** The port type function has returned an invalid port type. This is an indication that the port adapter hardware is not working properly. This error message should occur only during CIP startup.

**Recommended Action** If this error message is reproducible or occurs randomly and repeatedly, copy the message exactly as it appears, issue the **show tech-support** command, to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, call your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%CONFIG-3-BADFLUSH: Buffers not freed prior to shutdown: scb=[hex], addr=[hex]
```

**Explanation** During the shutdown processing, buffers were found queued to the channel. One of the device tasks did not properly flush the data prior to shutting down.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

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

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

**Recommended Action** The CIP has recovered by ignoring the request. Report this error to your Cisco 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. This error message should happen only when a new configuration statement is added to a CIP.

**Recommended Action** Enter the **show extended channel** command or the **show extended vc** command. Enter the **show tech-support** command. Report all the command output to your Cisco technical support representative.

**Error Message**

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

**Explanation** The Route Processor has 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** Issue the **show extended channel** command or the **show extended vc** command. Issue the **show tech-support** command. Report all the command output to your Cisco technical support representative.

**Error Message**

%CONFIG-3-CONFIGINIT: Invalid config registry identifier [dec]

**Explanation** During initialization, each application receives configuration commands from the system registers routines to process its configuration commands. In this case, an incorrect registration identifier was used. This is a fatal error.

**Recommended Action** The CIP has been restarted.

**Error Message**

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

**Explanation** The router has attempted to remove an existing device but has provided an incorrect device type. This is an internal logic error. The original configuration remains.

**Recommended Action** If this error message occurs repeatedly, copy the error message exactly as it appears, issue the **show extended channel subchannel EXEC** command and the **show tech-support** commands, and provide your Cisco technical service representative with the command output.

**Error Message**

%CONFIG-3-DOWNREV: The [chars] feature is not supported on CIP HW rev [dec].[dec].  
Please upgrade your CIP

**Explanation** A feature was configured that is not supported on this CIP hardware revision. The feature was activated but is not guaranteed to work properly.

**Recommended Action** Upgrade your CIP to either a CIP with hardware version 4.4 or a CIP2.

**Error Message**

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

**Explanation** The Route Processor has attempted to configure a device that already exists. This is an internal logic error. The configuration request was ignored.

**Recommended Action** If this problem is reproducible, provide the information on how to reproduce it to your Cisco technical service representative together with the output of **show extended channel** and **show tech-support** commands.

**Error Message**

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

**Explanation** The Route Processor has 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. This error message only should happen when a new configuration statement is added to a CIP.

**Recommended Action** If this problem is reproducible, provide the information on how to reproduce it to your Cisco technical service representative together with the output of **show extended channel** and **show tech-support** commands.

**Error Message**

%CONFIG-3-DUPVCN2: VCN [dec] already in use: ([hex]-[hex]-[hex]), no device found

**Explanation** The Route Processor has attempted to configure a device using a virtual circuit number that was already in use. There was no device found associated with this virtual circuit number. This is an internal logic error. The configuration request was ignored. This error message should happen only when a new configuration statement is added to a CIP.

**Recommended Action** If this problem is reproducible, provide the information on how to reproduce it to your Cisco technical service representative together with the output of the **show extended channel** and **show tech-support** commands.

**Error Message**

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

**Explanation** No memory was available for allocation to an application control block. The configuration request was ignored.

**Recommended Action** Install more memory for the CIP, or configure fewer devices.

**Error Message**

%CONFIG-3-NOCONFIG: No configuration routine registered for entry [dec]: [chars]

**Explanation** Configuration command processing is dynamically set up when features are added to an image. The feature required to process a configuration command is not a part of the current image.

**Recommended Action** Either run a CIP microcode load that supports the configuration command being issued or do not issue that configuration command.

**Error Message**

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

**Explanation** The Route Processor has 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** Copy the error message exactly as it appears on the console or in the system log and issue the **show extended channel** and **show tech-support** commands, to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show extended channel / sub** and **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

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

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

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log and issue the **show extended channel** and **show tech-support** commands, to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show extended channel / sub** and **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

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

**Explanation** No memory was available for allocation to a device block. The configuration request is ignored.

**Recommended Action** Install more memory 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-NOEMEM: [chars]

**Explanation** Not enough memory is available to process configuration commands on the channel adapter.

**Recommended Action** Verify the amount of memory installed on the channel adapter and upgrade if necessary.

**Error Message**

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

**Explanation** No memory was available for allocation to the logical path table. The configuration request was ignored.

**Recommended Action** Install more memory for the CIP, or configure fewer devices.

**Error Message**

%CONFIG-3-NOSPACE: No space to build configuration confirmation

**Explanation** Whenever the system sends a configuration command to the CIP, the CIP responds with a confirmation message. Sufficient memory was not available on the CIP to allocate a block to hold a confirmation message.

**Recommended Action** If you are not at the maximum CIP memory configuration, additional memory may be installed on the CIP. Otherwise, configure fewer channel connections.

**Error Message**

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

**Explanation** The Route Processor has 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. This error message should happen only when a configuration statement is removed from a CIP.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log and issue the **show extended channel** and **show tech-support** commands, to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show extended channel / sub** and **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%CONFIG-3-OFFLDEV: Offload device address ([hex]) must be even

**Explanation** The Route Processor has attempted to configure an odd address for an offload device. Offload configuration requests must specify an even address. This is an internal logic error. The configuration request was ignored.

**Recommended Action** If this problem is reproducible, provide the information on how to reproduce it to your Cisco technical service representative together with the output of the **show extended channel** and **show tech-support** commands.

**Error Message**

%CONFIG-3-STATEINIT: Too many state change notification routines

**Explanation** During initialization, each application that uses the virtual port adapter registers to receive notification when the **shutdown** or **no shutdown** commands are issued on that adapter. The table to hold these registration requests is too small. This is a fatal error. The CIP has been restarted.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CONFIG-3-TOOBIG: Configuration comand ([dec]) is too large ([dec]) to process

**Explanation** A feature was configured in which the configuration command is larger than the channel adapter can process. The configuration command will be ignored by the channel adapter.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**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-UNEXPCFG: Configuration command code [dec] is not supported

**Explanation** Configuration command processing is dynamically set up when features are added to an image. The feature required to process a configuration command is not a part of the current image.

**Recommended Action** Either run a CIP microcode load that supports the configuration command being issued or do not issue that configuration command.



**Error Message**

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

**Explanation** The CIP unconfigured a device and found that there were still messages left in its work queues. This is an internal logic error.

**Recommended Action** If this message occurs repeatedly or if it is reproducible, copy the error message exactly as it appears, issue the **show extended channel** and the **show tech-support** commands, to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show extended channel** and **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

## CMCC CTA Messages

The following are Channel Interface Processor (CIP) error messages for the channel transport architecture device task/mapper.

**Error Message**

`%CTA-6-BADCHAIN: PA[dec] CTA [hex]-[hex] Too many buffers in a CSNA write chain.`

**Explanation** All the data sent in a CSNA write chain should fit in one transfer list element. The data sent in the CSNA required more than one.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

`%CTA-0-ERRSTASH: PA[dec] CTA [hex]-[hex] buffer [hex] not in stash, pc: [hex]`

**Explanation** An error has been detected in the processing of host-bound messages.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

`%CTA-0-ERRSTATE1: PA[dec] CTA [hex]-[hex] sequence error during subchannel setup, pc: [hex]`

**Explanation** A sequence error has occurred. A host write was received when the subchannel setup was in a “pending open” state.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CTA-0-ERRSTATE2: PA[dec] CTA [hex]-[hex] sequence error during subchannel setup,  
pc: [hex]

**Explanation** A sequence error has occurred. A host write was received when the subchannel setup was in a “pending open” state.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CTA-0-ERRSTATE3: PA[dec] CTA [hex]-[hex] sequence error during subchannel setup,  
pc: [hex]

**Explanation** A sequence error has occurred. A host write was received when the subchannel setup was in a “pending open” state.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CTA-0-ERRSTATE4: PA[dec] CTA [hex]-[hex] sequence error during subchannel setup,  
pc: [hex]

**Explanation** A sequence error has occurred. A host write was received when the subchannel setup was in a “setup complete” state.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CTA-6-FLUSH: PA[dec] CTA [hex]-[hex] Read data flushed.

**Explanation** Because of an error on the channel, some data that was intended to be sent to the channel was not sent to the channel. The VTAM will receive an error indication and the VTAM should retry the operation.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CTA-6-INACT\_ATTN\_STATE: Attention FSM state: [chars]

**Explanation** This message indicates the state of the FSM. This message is associated with the previous INACTIVE message. An error involving the FSM has occurred.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CTA-6-INACT\_FLOW\_COUNTS: Flow stop/resume [int]/[int]

**Explanation** This message indicates the total count of “flow stop” and “flow resume” frames that were passed by CTA to the host. This message is associated with the previous INACTIVE message. An error involving the channel transport architecture device task/mapper has occurred.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CTA-6-INACT\_FLOW\_QUEUED: Flow Resume queued in CTA: [int]

**Explanation** This message indicates the number of “flow resume” messages that were queued to the host in the CTA. This message is associated with the previous INACTIVE message. An error involving the channel transport architecture device task/mapper has occurred.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CTA-6-INACT\_FREEMEM: Free Memory: [hex]

**Explanation** This message indicates the current amount of free memory. This message is associated with the previous INACTIVE message.

**Recommended Action** No action is required.

**Error Message**

%CTA-0-INACTIVE: PA[dec] CTA [hex]-[hex] reset after being inactive for [dec] seconds

**Explanation** The specified subchannel has been inactive for more than the subchannel timeout interval. Either the host has been halted or the VTAM has been terminated by a **z net cancel** command.

**Recommended Action** Restart the VTAM HOST and activate the XCA major node.

**Error Message**

%CTA-6-INACT\_SCBS: SCBs in SLC: [dec]

**Explanation** This message indicates the number of SCBs that are queued in the SLC. It is associated with the previous INACTIVE message.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CTA-6-INACT\_SLOWDOWN: Slowdown [chars]: [chars], [int] ms

**Explanation** This message indicates the slowdown state and duration. This message is associated with the previous INACTIVE message. An error involving the channel transport architecture device task/mapper has occurred.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CTA-6-INIT: PA[dec] CTA [hex]-[hex] Device initialized

**Explanation** A CSNA device has been initialized. The device string is in the form CSNA *x/yyyy/zz*, where *x* is the daughterboard number, *yyyy* is the path, and *zz* is the device number.

**Recommended Action** No action is required.

**Error Message**

%CTA-6-LONGREC: PA[dec] CTA [hex]-[hex] Attempt to transmit too large a record.

**Explanation** The amount of data being read by the channel has exceeded the size of the read CCW.

**Recommended Action** If this message occurs with CSNA and the MAXPIU variable is set to less than 4500, then increase the MAXPIU value. Otherwise, report this error to your Cisco technical support representative.

**Error Message**

%CTA-0-MSGERR1: PA[dec] CTA [hex]-[hex] mismatch between channel block size and msg counts

**Explanation** An error involving a mismatch between the channel block size and the message counts has occurred.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CTA-0-MSGERR2: PA[dec] CTA [hex]-[hex] msg size less than DLC hdr size

**Explanation** The host has sent an invalid message. The message size is less than the DLC header size.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CTA-0-MSGERR3: PA[dec] CTA [hex]-[hex] Received CTA command not recognized

**Explanation** A CTA command code has been received that is not in the valid range.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CTA-0-NOMEM: CTA attempt to acquire memory failed, pc: [hex]

**Explanation** An attempt by the CTA to create a pool or allocate a buffer has failed.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CTA-0-QUEUE\_ERROR: PA[dec] CTA [hex]-[hex] attempt to init or alloc a queue failed at [hex]

**Explanation** An attempt by the CTA to initialize or allocate a queue has failed.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CTA-6-SHUTDOWN: PA[dec] CTA [hex]-[hex] Device shutdown

**Explanation** A CSNA device has been shut down. The device string is in the form CTA*n*/*mmmm*/*yy*, where *n* is the daughterboard number, *mmmm* is the path, and *yy* is the device number.

**Recommended Action** No action is required.

**Error Message**

```
%CTA-0-SYSMGT_ERROR1: CTA detected error in sysmgt call: invalid CSNA DEVICE length
```

**Explanation** An invalid parameter has been received in a system management call.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%CTA-0-SYSMGT_ERROR2: CTA detected error in sysmgt call: invalid LLC2 CONN length
```

**Explanation** An invalid parameter has been received in a system management call.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%CTA-0-SYSMGT_ERROR3: CTA detected error in sysmgt call: invalid CSNA type
```

**Explanation** An invalid parameter has been received in a system management call.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%CTA-0-UNEXP_ATTEN_EVENT: PA[dec] CTA [hex]-[hex] unexpected event [int] in attn state [int], setup state [int]
```

**Explanation** An unrecognized event has been received by the CTA attention FSM. The receipt of the unrecognized event is an unrecoverable situation. This instance of CTA is initialized, and the CMPC TG node must be cycled to resume operation.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%CTA-0-UNEXP_EVENT: PA[dec] CTA [hex]-[hex] received unrecognized type code [hex] at [hex]
```

**Explanation** A transfer element type code not in the valid range has been received.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CTA-0-UNEXP\_LSI\_CMD: PA[dec] CTA [hex]-[hex] received LSI command [hex] at [hex]

**Explanation** An LSI command code not in the valid range has been received.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%CTA-0-UNEXP\_LSI\_STATUS: CTA received status [hex] in LSI cmd [hex]

**Explanation** An LSI status code not valid for the command has been received.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## CMCC DEBUGGER Messages

The following are Channel Interface Processor (CIP) error messages that are issued when nonrecoverable errors occur on the CIP.

**Error Message**

%DEBUGGER-0-CCHAIN: [chars]

**Explanation** This message shows a line from the call chain and is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is printing out contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

```
%DEBUGGER-0-CIP_HWVINFO: SNr. [dec] HWRev. [int].[int] EPROM [int].[int] VPLD
[int].[int]
```

**Explanation** This message contains hardware version information. This is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is printing out contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

```
%DEBUGGER-0-CIP_SWVINFO: [chars] [dec].[dec] [chars]
```

**Explanation** This message contains software version information. This is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is printing out contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.



**Error Message**

%DEBUGGER-3-CONSOLE\_IP: Invalid IP console registry identifier [dec]

**Explanation** During initialization, each application that uses an IP address registers a routine to be used by the **console dcb** command to fetch the IP address. The identifier associated with a routine was not within a valid range. This is a fatal error. The CIP has been restarted.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%DEBUGGER-3-CONSOLE\_TX: Invalid TX buffer console registry identifier [dec]

**Explanation** During initialization, each application that uses global transmit buffers registers a routine to be used by the **console dcb** command to fetch the buffer counts. The identifier associated with a routine was not within a valid range. This is a fatal error. The CIP has been restarted.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%DEBUGGER-0-FATAL\_ERROR: Fatal error (code=[dec])

**Explanation** A fatal internal CIP error has occurred. The CIP has encountered an unrecoverable problem and is printing out contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%DEBUGGER-0-INVALID\_ADDR: address [hex] is invalid

**Explanation** An invalid address has been detected while trying to perform a stack dump. This is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is printing out contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%DEBUGGER-0-LCORE\_DATA: [hex] [hex] [hex] [hex] [hex] [hex] [hex] [hex] [hex]

**Explanation** This message displays data from the low core area of the CIP. This is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is printing out contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

`%DEBUGGER-0-LCORE_START: Dump of lowcore`

**Explanation** This message begins a dump of the CIP low core memory. This is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is printing out contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

`%DEBUGGER-0-RESTART: Restart due to breakpoint`

**Explanation** A fatal internal CIP error has occurred. This message indicates that the CIP has finished printing all debugging information and is attempting a restart. This is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is printing out contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%DEBUGGER-0-STACK1: [hex] [hex] [hex]

**Explanation** A fatal internal CIP error has occurred. This message indicates a line of stack information. This is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is printing out contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%DEBUGGER-0-STACK2: [hex] [hex] [hex] [hex] [hex]

**Explanation** A fatal internal CIP error has occurred. This message indicates a line of stack information. This is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is printing out contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

```
%DEBUGGER-0-STACK3: [hex] [hex] [hex] [hex] [hex] [hex] [hex]
```

**Explanation** A fatal internal CIP error has occurred. This message indicates a line of stack information. This is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is printing out contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

```
%DEBUGGER-0-STACK4: [hex] [hex] [hex] [hex] [hex] [hex] [hex] [hex] [hex]
```

**Explanation** A fatal internal CIP error has occurred. This message indicates a line of stack information. This is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is printing out contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task
- The first 1KB of the stack of the currently active task.

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%DEBUGGER-0-STACK\_DATA1: [hex] [hex]

**Explanation** A fatal internal CIP error has occurred. This message indicates a line of internal interrupt stack information. This is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is printing out contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%DEBUGGER-0-STACK\_DATA2: [hex] [hex] [hex]

**Explanation** A fatal internal CIP error has occurred. This message indicates a line of internal interrupt stack information. This is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is printing out contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

```
%DEBUGGER-0-STACK_DATA3: [hex] [hex] [hex] [hex]
```

**Explanation** A fatal internal CIP error has occurred. This message indicates a line of internal interrupt stack information. This is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is printing out contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

```
%DEBUGGER-0-STACK_DATA4: [hex] [hex] [hex] [hex] [hex]
```

**Explanation** A fatal internal CIP error has occurred. This message indicates a line of internal interrupt stack information. This is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is printing out contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%DEBUGGER-0-STACK\_DATA5: [hex] [hex] [hex] [hex] [hex] [hex]

**Explanation** A fatal internal CIP error has occurred. This message indicates a line of internal interrupt stack information. This is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is printing out contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%DEBUGGER-0-STACK\_DATA6: [hex] [hex] [hex] [hex] [hex] [hex] [hex]

**Explanation** A fatal internal CIP error has occurred. This message indicates a line of internal interrupt stack information. This is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is printing out contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.



**Error Message**

```
%DEBUGGER-0-STACK_DATA7: [hex] [hex] [hex] [hex] [hex] [hex] [hex] [hex]
```

**Explanation** A fatal internal CIP error has occurred. This message indicates a line of internal interrupt stack information. This is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is printing out contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

```
%DEBUGGER-0-STACK_DATA8: [hex] [hex] [hex] [hex] [hex] [hex] [hex] [hex] [hex]
```

**Explanation** A fatal internal CIP error has occurred. This message indicates a line of internal interrupt stack information. This is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is printing out contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%DEBUGGER-0-STACK\_DUMP0: [chars], base=[hex], stack\_size=[hex]

**Explanation** A fatal internal CIP error has occurred. This message indicates the beginning of the stack for the current task and is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is providing contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%DEBUGGER-0-STACK\_DUMP1: sp=[hex], pc=[hex], ra=[hex]

**Explanation** A fatal internal CIP error has occurred. This message indicates the second line from the dump of the stack for the current task and is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is providing contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%DEBUGGER-0-STACK\_OVERFLOW: overflow condition detected for this task: [chars]

**Explanation** A fatal internal CIP error has occurred. This message indicates that the current task has overflowed its stack and is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is providing contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%DEBUGGER-0-STACK\_START: Stack addr: [hex]

**Explanation** A fatal internal CIP error has occurred. This messages indicates the beginning of a dump of the internal interrupt stack and is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is providing contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%DEBUGGER-0-TRACE\_ADDR: Table:[hex] Next:[hex] First:[hex] Last:[hex] Full:[hex]

**Explanation** A fatal internal CIP error has occurred. This message indicates the internal trace table header, which is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is providing contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%DEBUGGER-0-TRACE\_DATA: [hex] [hex] [hex] [hex] [hex] [hex] [hex] [hex] [hex]

**Explanation** A fatal internal CIP error has occurred. This message indicates a single entry from the internal trace table, which is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is providing contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%DEBUGGER-0-TRACE\_START: Dump of trace table

**Explanation** A fatal internal CIP error has occurred. This message indicates the beginning of a dump of the internal trace table. This is part of a fatal error dump. The CIP has encountered an unrecoverable problem and is providing contextual information about where the problem occurred. A fatal error dump consists of the following parts:

- Headlines with software and hardware versions
- The load map of all the dynamically loaded code segments
- All the interrupt stacks currently in use
- The trace table
- The first 1 KB of CIP low core memory
- The first 1 KB of the stack of the currently active task

**Recommended Action** To capture all these error messages, ensure that you have set the **logging buffered** command to 64000, or log to a system log server. Frequently such a fatal error dump is immediately preceded by some additional CIP error messages. Ensure that you capture those messages as well. Call your Cisco technical support representative and provide the representative with the gathered information.



## CMCC DIAG Messages

The following are Channel Interface Processor (CIP) error messages for diagnostic testing.

### 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** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

### Error Message

```
%DIAG-6-BADLOAD: Firmware load error. Unable to run_diag
```

**Explanation** A request was made to run an ECA diagnostic, but the firmware for the port adapter did not load properly. This is an internal logic error. The request to run the diagnostic is ignored.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## CMCC DMA Messages

The following are error messages for the direct memory access (DMA) function on the Channel Interface Processor (CIP) that is responsible for transferring data between the dynamic RAM (DRAM) on the CIP and the memory device facility.

### Error Message

```
%DMA-0-BADFIFO: FIFO failure detected during transfer ([dec] [hex])
```

**Explanation** An error has occurred in one of the FIFO hardware components used in the DMA transfer operation. This failure was detected and has resulted in the dropping of a packet. This problem is an indication of either a very serious software bug or a CIP hardware problem. This error could happen if you are running a version of CIP microcode that is incompatible with the hardware revision of this CIP motherboard.

**Recommended Action** If you are sure that you are running a supported version of CIP microcode, copy the error message exactly as it appears on the console or in the system log, issue the **show tech-support** command, and provide the information to your Cisco technical support representative.

**Error Message**

%DMA-3-BADXFER: Invalid DMA request type ([hex] [dec])

**Explanation** An unsupported DMA request type has been detected.

**Recommended Action** If you are sure that you are running a supported version of CIP microcode, copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

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

**Explanation** The DMA controller started a read or write operation and did not receive a response from the CBUS indicating the completion status. This error could be caused by an improperly seated card in the router or by an intermittent hardware problem on the CIP, the SP, the RSP, or the chassis.

**Recommended Action** If this message occurs repeatedly, first try reseating all the cards in the router. If this does not fix the problem, copy the error message exactly as it appears on the console or in the system log, issue the **show tech-support** command, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

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

**Explanation** A parity error was detected on the CBUS during a data transfer. This error could be caused by an improperly seated card in the router or by an intermittent hardware problem on the CIP, the SP, the RSP, or the chassis.

**Recommended Action** If this message occurs repeatedly, first try reseating all the boards in the router. If this does not fix the problem, copy the error message exactly as it appears on the console or in the system log, issue the **show tech-support** command, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

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

**Explanation** A parity error was detected during a DMA data transfer. This error could be caused by an improperly seated card in the router or by an intermittent hardware problem on the CIP, the SP, the RSP, or the chassis.

**Recommended Action** If this message occurs repeatedly, first try reseating all the boards in the router. If this does not fix the problem, copy the error message exactly as it appears on the console or in the system log, issue the **show tech-support** command, contact your Cisco technical support representative, and provide the representative with the gathered information.



**Error Message**

```
%DMA-3-DMAFAIL: DMA request failed ([hex])
```

**Explanation** A failure occurred during an attempted packet transfer.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

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

**Explanation** The DMA controller indicated to the CIP that the current DMA transfer had completed, but the DMA status register showed that the transfer was still in progress. This is a CIP hardware problem, from which the software cannot recover. The CIP has restarted after a fatal error dump. This error could happen if you are running a version of CIP microcode that is incompatible with the hardware revision of this CIP card.

**Recommended Action** If you are sure that you are running a supported version of CIP microcode, copy the error message exactly as it appears on the console or in the system log, issue the **show tech-support** command, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

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

**Explanation** The DMA controller tried to start a read or write operation but did not receive a response from the CBUS within 10 microseconds. This error could be caused by an improperly seated card in the router or by an intermittent hardware problem on the CIP, the SP, the RSP, or the chassis.

**Recommended Action** If this message occurs repeatedly, first try reseating all the cards in the router. If this does not fix the problem, copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

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

**Explanation** The DMA controller indicated to the CIP that the current DMA transfer had completed, but there was no record of a transfer in progress. This is an indication of either a very serious software bug or a CIP hardware problem. In either case, this error condition is not recoverable. The CIP has restarted after a fatal error dump. This error could happen if you are running a version of CIP microcode that is incompatible with the hardware revision of this CIP card.

**Recommended Action** If this message occurs repeatedly, first try reseating all the cards in the router. If this does not fix the problem, copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

```
%DMA-0-REGISTERS: [hex] [hex] [hex] [hex]
```

**Explanation** This message follows some of the other DMA related error messages. It provides some context for those error messages.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## CMCC ECPA and ECPA4 Messages

The CIP, CIP2, ECPA, ECPA4, and PCPA messages all use the same message format. For details on how to locate and interpret these messages, refer to [CMCC CIP and CIP2 Messages](#).

## CMCC GET\_DATA Messages

The following Channel Interface Processor (CIP) error messages are 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.

**Recommended Action** The CIP has restarted. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## CMCC GT64011 Messages

The following are channel port adapter GT64011 error messages.

**Error Message**

```
%GT64011-2-ERROR_INT: GT64011 Error (cause=[hex])
```

**Explanation** An unexpected GT64011 error interrupt has occurred.

**Recommended Action** Ensure all port adapters are properly seated. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%GT64011-2-ERROR_REGS: GT64011: Bus Error = [hex], Address Decode Error = [hex]
```

**Explanation** An unexpected GT64011 error interrupt has occurred.

**Recommended Action** Ensure all port adapters are properly seated. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%GT64011-2-UNKNOWN_ID: GT64011 Unknown Device or Vendor ID ([hex])
```

**Explanation** The GT64011 was found to have an incompatible device or vendor ID.

**Recommended Action** If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## CMCC INT Messages

The following are Channel Interface Processor (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** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**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** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**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** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**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** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**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** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**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** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**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** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

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

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

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## CMCC IPC Messages

The following are Channel Interface Processor (CIP) error messages related to the interprocess communication (IPC) subfacility.

**Error Message**

%IPC-2-CANT\_SEND: Cannot send IPC message: [chars]

**Explanation** An error has occurred in the IPC slave discovery mechanism. It might result in a malfunction in the operation of the IPC.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%IPC-4-CONSISTENCY: Message failed consistency check: [chars]

**Explanation** An internal inconsistency has been found in some IPC data structures.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%IPC-3-DELETED: Attempt to delete an IPC message ([hex]) a second time

**Explanation** An internal inconsistency has been found in some IPC data structures.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show ipc status** command, as well as the **show ipc queue** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%IPC-3-GIANT: Request for giant IPC packet denied. Request size = [dec]

**Explanation** A message has been requested that was too large for the IPC system.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show ipc status** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show ipc status** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%IPC-2-LOCK: Lock done a deleted element

**Explanation** An internal inconsistency has been found in some IPC data structures.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%IPC-3-NOBUFF: The [chars] IPC message header cache has emptied

**Explanation** The specified IPC message header cache has been emptied.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show ipc status** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show ipc status** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

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

**Explanation** The IPC application cannot be initialized because its initialization function does not appear in the IPC initialization function list.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

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

**Explanation** The IPC user has failed to provide any means of handling the received message.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show ipc ports** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show ipc ports** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%IPC-2-NOMEM: No memory available for [chars]

**Explanation** The IPC subsystem could not obtain the memory it needed.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

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

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

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show ipc status** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show ipc status** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

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

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

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

```
%IPC-1-TNIPC_CALLBACK: TN3270 IPC callback error: [chars][chars]
```

**Explanation** The TN3270 server attempted to obtain information from the RP, but the TN3270 server detected an error while processing the response from the RP. This is an internal program logic error.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%IPC-1-TNIPC_RPC: TN3270 IPC request error: [chars][chars]
```

**Explanation** The TN3270 server has failed to obtain information from the RP.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%IPC-2-UNLOCK: Unlock done on already unlocked element
```

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

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## CMCC IPC\_DRVR Messages

The following are interprocess communication (IPC) driver error messages.

**Error Message**

```
%IPC_DRVR-2-DMAERR: DMA Error detected - [chars]([dec])
```

**Explanation** The IPC DRVR packet switch notification has detected a DMA transfer error.

**Recommended Action** The IPC subsystem is used by the channel adapter loader and channel adapter network management. A single DMA error will not impact these channel adapter functions. However, if you are experiencing problems loading the channel adapter or retrieving information from the channel adapter, you will have to reload the channel adapter microcode. In any case, report this message to your Cisco technical support representative.



**Error Message**

%IPC\_DRVR-4-NOMEM: Unable to obtain [chars]

**Explanation** The IPC DRVR transport subsystem could not obtain the memory it needed.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## CMCC IPP Messages

The following are error messages for the encryption feature.

**Error Message**

%IPP-3-PKT\_EXCEEDS\_MTU: [chars]: Outbound Packet size [dec] exceeds max MTU size for CMCC

**Explanation** An outbound CMPC packet is larger than the MTU size for the CMCC.

**Recommended Action** Investigate why the host is sending packets that are larger than the configured MTU size on the CMCC.

## CMCC LOADER Messages

The following are Channel Interface Processor (CIP) error messages related to the relocating loader facility.

**Error Message**

%LOADER-3-ABSERR: Error: not handled - Symbol [chars] is absolute

**Explanation** The loader does not handle variables of this type.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-ALOCER1: Error: Allocating storage - load fails

**Explanation** There is not enough memory to load this file.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information. More storage will probably be needed. You might use the current storage more efficiently by running a different combination of features.

**Error Message**

%LOADER-3-ALOCER2: Error: Did not allocate storage - loading of data failed.

**Explanation** There is not enough memory to load this file.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information. More storage will probably be needed. You might use the current storage more efficiently by running a different combination of features.

**Error Message**

%LOADER-3-ATFERR: Error: atf array overflow

**Explanation** The ATF array is too small. The ATF array is an array of areas to be freed when an attempted load fails.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-BADSHT: Error: Section header type [hex]([dec]) not understood

**Explanation** The input file is not in the proper format.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-BADVERS: [chars]: Invalid segment version: [chars]

**Explanation** The segment version does not match the rest of the currently loaded software.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-BAKEXP: Error: Deleting external symbol [chars] from the exported table.

**Explanation** The symbols should have been deleted from the table, but they were not. This will probably cause problems during future file loads.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-BIGEND: Error: Input is not big endian

**Explanation** The input file is not the correct type for loading.

**Recommended Action** Check the input file type. If the file type is correct, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-BINDERR: Error: Bind value in symbol table entry not understood

**Explanation** The loader cannot handle variables of the type given.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-COMERR: Error: type not handled, must be .scommon

**Explanation** The loader cannot handle input files of the type given.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-COMMIX: Error: common variable [chars] matches name of non-common loaded variable.

**Explanation** An error has occurred in the input files.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-COMPER: Error: Compiled for incorrect target machine

**Explanation** The input file is not the correct type for loading.

**Recommended Action** Check the input file type. If the file type is correct, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-DREADE: Error: Reading in program data

**Explanation** An error has prevented the loader from reading a section of the file.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-DUPEXP: Error: Duplicate exported external symbol [chars] not allowed

**Explanation** The file being loaded attempted to export a symbol that had already been exported by a previously loaded file. There is a conflict between loadable files and the kernel.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-EIDENT: Error: File header has unknown data in e\_ident area

**Explanation** The input file is not in the correct format needed for loading.

**Recommended Action** Check the input file format. If the format is correct, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-ELF32: Error: Input is not an ELF32 file

**Explanation** The input file is not in the correct format needed for loading.

**Recommended Action** Check the input file format. If the format is correct, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-ELFH: Error: Cannot read ELF header from input file

**Explanation** The loader could not read the module header information from the input file.

**Recommended Action** Check the input file format. If the format is correct, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-ERR16H: Error: processing HI16 LO16 pair. Low without High

**Explanation** The loader cannot handle relocation entries of the type given.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-ERR16M: Error: processing HI16 LO16. Low [hex] does not match High [hex]

**Explanation** The loader cannot handle relocation entries of the type given.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-ERRCNR: Error: Cannot relocate - required symbol [chars] is not resolved

**Explanation** A required symbol is missing.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-FCLOSE: Warning: File close failed, code = [dec]

**Explanation** Loading is complete, but the close process has failed.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-FILESIZE: Unable to access image file

**Explanation** The CIP has failed to access necessary image files.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-FOPEN: Error: Cannot open the input file "[chars]".

**Explanation** An error occurred during an attempt to open a file to be loaded.

**Recommended Action** Confirm that the file exists. If the file does not exist, create it if possible. If the problem persists, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-FOPENBZ: Cannot open [chars] - busy (code [dec]), have tried every 5 secs for a minute.

**Explanation** A required file is currently in use. The open process was retried every 5 seconds for a minute before failing.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-FOPENER: Error: file ([chars]) open failure code [dec]

**Explanation** A required file cannot be opened.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-FREADE: Error: reading, offset: [hex] size: [hex]([dec])

**Explanation** The loader could not read the input file. The load has failed.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-GPPROB: Error: Allocation of GP relative space problem: [hex]([dec]) left, [hex]([dec]) needed.

**Explanation** The space needed for the allocation of a larger area has been exhausted.

**Recommended Action** Sufficient space should be allocated in advance. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-GREADE: Error: reading in GP relative section data

**Explanation** An error prevented the loader from reading a section of the file.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-HDRSIZ: Error: this size header entry cannot be handled.

**Explanation** The file is not in the proper format. The loader cannot handle it.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-HDRVER: Error: Input is not current version

**Explanation** The object file format of the input file is not the correct version.

**Recommended Action** Check the file format version. If the file version is correct, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-0-HEADER: Loading file [chars]:

**Explanation** This message precedes other messages relating to loading a file. It is a header to identify the name of the file being loaded.

**Recommended Action** Copy this message and the following messages exactly as they appear on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-HILO16MX: Error: HI/L016 relocation table exceeded max of [dec]

**Explanation** There is not enough space for the new allocation. Sufficient space should be allocated in advance.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-HREADE: Error: Cannot read headers from the file

**Explanation** An error occurred during an attempt to read the file headers.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-INSUFF: Error: insufficient space for suballocation: [hex]([dec]) left, [hex]([dec]) needed.

**Explanation** There is not enough space for the new allocation.

**Recommended Action** Sufficient space should be allocated in advance. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-0-INVALIDIOS: IOS version incompatible with CIP - must be at least [dec].[dec]

**Explanation** The version of Cisco IOS software in use is incompatible with this CIP microcode image.

**Recommended Action** The Cisco IOS software must be updated to match the CIP version. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-6-LOADING: [chars] -- [dec] bytes

**Explanation** The CIP has successfully loaded a segment image.

**Recommended Action** No action is required.

**Error Message**

%LOADER-0-LOADMAP\_DATA1: Ver: [chars] Rev: [dec] Segment: [chars]

**Explanation** This message identifies the segment whose section information follows.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.



**Error Message**

%LOADER-0-LOADMAP\_DATA2: [hex] [hex] [dec] [chars]

**Explanation** This message provides data for addresses, sizes, and so on, of modules loaded into the CIP storage.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-0-LOADMAP\_DATA3: [chars]

**Explanation** This message displays the compile information for the specified segment.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-0-LOADMAP\_EMPTY1: Loader initialization is not complete, no segments loaded.

**Explanation** The loader has not been initialized; therefore, no modules are loaded in CIP storage.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-0-LOADMAP\_EMPTY2: No segments have been loaded.

**Explanation** The loader has not loaded any modules into CIP storage.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-0-LOADMAP\_HEAD0: Segment Load Map

**Explanation** This message precedes and introduces data listing the map of modules loaded into CIP storage. It also acts as a header for the displayed data.

**Recommended Action** Copy the error message and the lines of data exactly as they appear on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-0-LOADMAP\_HEAD1: Start End Size Name

**Explanation** This message precedes and introduces data listing the map of modules loaded into CIP storage. It also acts as a header for the displayed data.

**Recommended Action** Copy the error message and the lines of data exactly as they appear on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-LOADRC: Error: Return code is [hex]([dec])

**Explanation** This message displays the error level on the load failure.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-MAXRSE: Error: too many Resident Symbol Tables

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

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-MAXSEC: Error: Total number of sections has exceeded pre-allocated space for [dec] entries.

**Explanation** A preallocated memory area is not large enough for loading.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-MAXSTRT: Error: Too many string tables

**Explanation** A preallocated memory area is not large enough for loading.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-MAXSYMT: Error: Too many symbol tables

**Explanation** A preallocated memory area is not large enough for loading.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-NOBITS0: Error: NOBITS but size [dec] is not 0, not understood

**Explanation** Either the loader cannot process the input file or the file is not in the proper format.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-NODSO: Error: section contains dynamic shared objects

**Explanation** A section of the input file contains dynamic shared objects. The input file cannot have dynamic shared objects.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-NOELF: Error: Input is not an ELF file

**Explanation** The input file is not in the correct format.

**Recommended Action** Check the input file format. If the format is correct, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-NOERES: Error: Could not resolve external symbol [chars]

**Explanation** A reference to an external symbol from the file being loaded cannot be resolved.

**Recommended Action** Define all prerequisite external symbols before loading the file. If problems persist, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-NOPREFIX: Unable to determine microcode image name

**Explanation** The CIP is unable to compose the microcode image name.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-NOPRG: Error: No code to handle program headers

**Explanation** The input file is not in the correct format.

**Recommended Action** Check the input file format. If the format is correct, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-NOSECH: Error: No section headers to process

**Explanation** The input file is not in the proper format.

**Recommended Action** Check the input file format. If the format is correct, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-NOSO: Error: section contains symbols conflicting with shared objects

**Explanation** A section of the input files contains symbols that conflict with shared objects. The input file cannot have shared objects.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-NOTRE: Error: File is neither relocatable nor executable

**Explanation** The input file is not in the correct format.

**Recommended Action** Check the input file format. If the format is correct, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-NOVERS: [chars]: No entry for "loader\_segment\_version"

**Explanation** The loader requires that a file to be loaded must have an entry, loader\_segment\_version, containing a specific structure.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-READERR: Error: file read failure code [dec]

**Explanation** An error occurred while the file was being read.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-RELFLG: Error: Cannot handle the flags in the relocation entry

**Explanation** The loader cannot handle relocation entries of this type.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-RELREAD: Error: Cannot read relocation entries

**Explanation** The loader could not read part of the file.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-RELTYP: Error: relocation type [hex]([dec]) not recognized

**Explanation** The loader cannot handle this type of relocation.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-RELTYP2: Error: relocation type R\_MIPS\_[chars] not handled.

**Explanation** The loader cannot handle this type of relocation.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-RESERR: [chars] [dec] external symbols cannot be resolved

**Explanation** Either the prerequisite files are not loaded or the loader cannot recognize some external symbols that are referenced.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-SECERR: Error: Cannot handle section [chars]

**Explanation** The loader cannot process this type of section of the code.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-SEEKER: Error: file seek failure code [dec]

**Explanation** A file seek failure has occurred.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-SHFLAGE: Error: no storage allocated - sh\_flags did not indicate how

**Explanation** The loader cannot handle this file.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-SHNHIPE: Error: not handled -End appl specific range of indices

**Explanation** The loader cannot handle variables of this type.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-SHNHIR: Error: not handled - End reserved range of indices

**Explanation** The loader cannot handle variables of this type.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-SIZERR1: Error: common variable [chars] has a size incompatible with loaded variable.

**Explanation** The loader cannot allocate a larger variable to an already loaded smaller variable.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-SORBER: Error: type not handled, must be .sdata or .sbss.

**Explanation** The loader cannot handle this type of file.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-SREADE: Error: Cannot read in symbol string

**Explanation** The loader could not read a needed section of the file.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-SREADS: Error: Cannot read in symbol table

**Explanation** An error prevented reading a part of the file that is necessary for loading.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-STOTHER: Error: Problem: a symbol table entry is using field ST\_OTHER

**Explanation** The loader cannot handle this file.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-STREXE: Error: Strings exceed string table area allocated [dec] > [dec]

**Explanation** A preallocated memory area is not large enough for loading.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-SUNDERR: Error: not handled - Small undefined symbol

**Explanation** The loader cannot handle variables of this type.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-SYMEXE: Error: Symbols exceed symbol table area allocated [dec] > [dec]

**Explanation** A preallocated memory area is not large enough for loading.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.



**Error Message**

%LOADER-3-SYRERR: Error: Relocation entry symbol, [hex]([dec]), is not in symbol table

**Explanation** This is an error in the input file.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-TSHSIZ: Error: total sections headers [hex]([dec]) too large for pre-allocated area [hex]([dec]).

**Explanation** A preallocated memory area is not large enough for loading.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-TYPERR: Error: Type value in symbol table entry not understood

**Explanation** The loader cannot handle variables of this type.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-USRERR: Error: not handled - Undefined section reference

**Explanation** The loader cannot handle variables of this type.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%LOADER-3-VARHIP: Error: Symbol is HIPROC variable - not handled

**Explanation** The loader cannot handle variables of this type.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%LOADER-3-VARLOP: Error: Symbol is LOPROC variable - not handled
```

**Explanation** The loader cannot handle variables of this type.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## CMCC LOVE Messages

The following are Channel Interface Processor (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 for port [dec] ([dec])
```

**Explanation** An attempt to transfer statistics to the router from the CMCC card has failed.

**Recommended Action** The CMCC card tried to recover by dropping the buffer that contained the statistics. However, it is possible that one or more buffers were lost in the process. Copy the error message exactly as it appears on the console or in the system log, issue the **show tech-support** command, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%LOVE-3-NOMEM: No memory available for Love Letter processing
```

**Explanation** The CMCC card does not have enough memory to start the “love letter” (operating status or configuration message) processing. Love letters are used to transmit channel statistics to the Cisco IOS software. No love letters will be transmitted by this CMCC card.

**Recommended Action** Verify the amount of memory installed on the channel adapter and upgrade if necessary.

## CMCC MBUF Messages

The following are memory buffer error messages.

**Error Message**

```
%MBUF-0-MFREEx2: mfree: mbuf [hex] already free'd from pc=[hex] ra=[hex]
@(pc=[hex]ra=[hex])
```

**Explanation** A request was made to free a memory buffer that was already free.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%Mbuf-0-PANIC: panic[[chars]@[dec]] in [chars]: [chars]
```

**Explanation** An unexpected internal error has occurred in the TCP/IP stack.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## CMCC MEMD Messages

The following are Channel Interface Processor (CIP) error messages related to the memory device facility.

**Error Message**

```
%MEMD-3-BADIPC: IPC message received with no IPC handler
```

**Explanation** An IPC message was queued to the CIP, but there was no handler defined to process it. This error occurs if the IPC subsystem was not initialized at the time an IPC message was received. The CIP has dropped the IPC message.

**Recommended Action** If this message appears repeatedly, copy the error message exactly as it appears on the console or in the system log, issue the **show tech-support** command, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%MEMD-3-BADPTR: Bad pointer in MEMD. Code: [hex]. ICB: [hex] Header: [hex], Data: [hex]
```

**Explanation** While a buffer queue was being processed in the MEMD, a pointer was found to have an invalid value. The CIP wrote an error code to the MEMD indicating that the pointer is corrupted. The SP or SSP will now report this error condition back to the RP, which in turn will restart the CBUS complex that resets all the interfaces.

**Recommended Action** First find out which card wrote the invalid pointer value to MEMD. You will need help from your Cisco technical service representative to set up the router for a MEMD snapshot in case of an error condition. Depending on what that snapshot shows, the investigation can be narrowed down to either a particular card in the router or a software problem. Copy the error message exactly as it appears on the console or in the system log, issue the **show tech-support** and **show extended channel subchannel** or **show extended vc** commands, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

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

**Explanation** A packet was queued to the CIP, but the virtual circuit associated with the packet is not valid. This could mean that the virtual circuit number is out of range or that there is no application registered to receive packets on this virtual circuit. The CIP has dropped the packet.

**Recommended Action** This message is followed by a dump of the beginning of the bad frame. If this error message appears repeatedly, copy the error message exactly as it appears on the console or in the system log, issue the **show tech-support** and **show extended channel subchannel** or **show extended vc** commands, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%MEMD-3-FRAME_DATA1: [hex] [hex] [hex] [hex] [hex] [hex] [hex] [hex]
```

**Explanation** This message contains a hex dump of data associated with the immediately preceding error message.

**Recommended Action** This message should always be preceded by either a MEMD-WRONGINT or a MEMD-BADVCN error message. Follow the recommended action as explained under that error message.

**Error Message**

```
%MEMD-3-FRAME_DATA2: [hex] [hex] [hex] [hex] [hex] [hex] [hex] [hex]
```

**Explanation** This message contains a hex dump of data associated with the immediately preceding error message.

**Recommended Action** This message should always be preceded by either a MEMD-WRONGINT or a MEMD-BADVCN error message. Follow the recommended action as explained under that error message.

**Error Message**

```
%MEMD-3-FRAME_START: Start address of bad frame: [hex] dumping from [hex]
```

**Explanation** This message contains the start address of a data frame with an incorrect virtual circuit number.

**Recommended Action** This message should always be preceded by either a MEMD-WRONGINT or a MEMD-BADVCN error message. Follow the recommended action as explained under that error message.

**Error Message**

`%MEMD-3-VCNDEREGISTER: Invalid VCN ([dec]) specified`

**Explanation** An attempt was made to deregister a routine to handle data for a given virtual circuit, but the virtual circuit number was out of range. The deregistration request is ignored.

**Recommended Action** This message should occur only when a configuration statement is removed from a CIP. Copy the error message exactly as it appears on the console or in the system log, issue the **show tech-support** and the **show extended channel subchannel** or **show extended vc** commands, and contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

`%MEMD-3-VCNREGISTER: Invalid VCN ([dec]) specified`

**Explanation** An attempt was made to register a routine to handle data for a given virtual circuit, but the virtual circuit number was out of range. No messages for the given virtual circuit will be accepted, and additional error messages will be generated for each message.

**Recommended Action** This message should occur only when a configuration statement is added to a CIP. Issue the **show extended channel subchannel** or **show extended vc** command, remove the configuration statement, and copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support command**, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

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

**Explanation** A packet was queued for the CIP with a valid virtual circuit number, but the virtual circuit number is associated with a different port adapter. The CIP has dropped the packet.

**Recommended Action** This message is followed by a dump of the beginning of the bad frame. If this error message appears repeatedly, copy the error message exactly as it appears on the console or in the system log, issue the **show tech-support** and **show extended channel subchannel** or **show extended vc** commands, contact your Cisco technical support representative, and provide the representative with the gathered information.

## CMCC MPC Messages

The following are error messages for the Multipath Channel (MPC) protocol.

**Error Message**

`%MPC-3-BAD_CONFIG_CODE: [chars]: Unrecognized config action code [dec]`

**Explanation** A TG configuration command has been received containing an unrecognized action code.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-BAD\_CONFIG\_DIR: PA[dec] MPC [hex]-[hex] bad direction code [hex]

**Explanation** The configuration message for a CMPC statement contains an invalid direction code.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-6-BAD\_DIRECTION: PA[dec] MPC [hex]-[hex] configured for [chars]

**Explanation** An XID2 message from the host has specified a subchannel read or write transfer direction that is different from the direction configured.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-BAD\_DLC\_CMD: Received MPC DLC command [hex] unrecognized

**Explanation** An MPC DLC frame has been received with an unrecognized DLC command.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-BAD\_FLAGS: Received MPC frame with invalid flags [hex]

**Explanation** An MPC block has been received with an unrecognized header configuration.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-BAD\_HDR: Unrecognized MPC header received: [hex] [hex]

**Explanation** An MPC block has been received with an unrecognized header configuration.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-BAD\_INB\_BFR: Inbound bfr to CMPC has no room for header

**Explanation** The CMPC is attempting to build a DLC header, but there is insufficient space in the inbound buffer.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-BLOCK\_SEQ\_ERROR: Block rcvd with seq num [hex], expected [hex]

**Explanation** An MPC block has been received with a sequence number error.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-CFG\_TYPE\_ERR: [chars]: CMPC TG partner type code invalid

**Explanation** The CMPC TG configuration block contains an invalid partner type code.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-CMPCP\_ACT\_ERR: Activate, but CvInfo block already active with handle [dec]

**Explanation** An attempt has been made to activate an MPC+ control block that is already active.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-CMPCP\_BLK\_FMT\_ERR: [chars]: [chars]

**Explanation** An MPC+ channel block that contains a format error has been received .

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-6-CMPCP\_CONN\_ACT: [chars]: [chars] Connection Activated

**Explanation** An IP type connection has been activated.

**Recommended Action** No action is required.

**Error Message**

%MPC-6-CMPCP\_CONN\_INACT: [chars]: [chars] Connection Deactivated

**Explanation** An IP type connection has been deactivated.

**Recommended Action** No action is required.

**Error Message**

%MPC-3-CMPCP\_CV\_ERR1: Unrecognized/Unexpected CV: [hex]

**Explanation** An unrecognized or unexpected MPC+ subvector has been received from the host.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-CMPCP\_CV\_ERR2: Possible Config error:\n Rcvd [chars] [chars], [chars]  
[chars]

**Explanation** CMPC+ has detected a mismatch between a value received from the host and a configured or generated value. A configuration error may have occurred.

**Recommended Action** If this is not the case, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-CMPCP\_CV\_ERR3: Corrupt CV Frame: [chars]

**Explanation** A received CV frame is corrupted.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.



**Error Message**

%MPC-3-CMPCP\_CV\_LEN\_ERR: Received subvector [hex] too long

**Explanation** An MPC+ subvector that is longer than the area reserved on the basis of protocol analysis has been received from the host .

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-6-CMPCP\_CV\_LOG: [chars]: Event/State [chars]/[chars]

**Explanation** This informational message is given before CMPCP\_CV\_ERR type messages to provide a more complete description of the problem.

**Recommended Action** See the CMPCP\_CV\_ERR message that follows.

**Error Message**

%MPC-3-CMPCP\_DUPL\_TOKEN: Duplicate group token, '[chars]' PA[dec] MPC [hex]-[hex]

**Explanation** An XID2 message from the host specifies a group token that has already been specified for another TG. A configuration error in which multiple read or write subchannels are specified in a TRLE may have occurred.

**Recommended Action** If this is not the case, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-CMPCP\_FRAME\_ERR1: [chars]: Frame rcvd on [chars] token [chars]

**Explanation** A problem has been detected with an MPC+ frame token.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-CMPCP\_FRAME\_ERR2: [chars]: Frame rcvd on [chars] token, [chars]: [hex]

**Explanation** A specific field in an MPC+ subvector received from the host is not recognized.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-CMPCP\_HANDLE\_ERR: All CMPC+ handles in use

**Explanation** An MPC+ handle cannot be allocated because the handle pool is empty.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-CMPCP\_INACT\_ERR: Inact, but CvInfo block already inactive

**Explanation** An attempt is made to deactivate an MPC+ control block that is already inactive.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-CMPCP\_PROT\_ERR: [chars]: Unrecognized Protocol Type: [hex]

**Explanation** The host has attempted to set the protocol type for a connection to a value not recognized by CMPC+.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-6-CMPCP\_STALE\_TOKEN: Rcvd MPC+ local token is stale

**Explanation** A local token was received that is no longer in use.

**Recommended Action** This action probably occurred during a TG shutdown sequence, with no associated operational problems. If an operation problem occurred, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-CMPCP\_TOKEN\_ERR: Error in rcvd MPC+ local token: [chars]

**Explanation** An invalid condition has been detected in a received local token.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-CMPCP\_TOKEN\_LEN\_ERR: Token detected with invalid size: [dec]

**Explanation** A token with an invalid length has been detected.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-CONFIG\_ERR: TG configured IP but channel protocol not MpcPlus

**Explanation** The host has attempted a channel connection to a TG but did not use the correct channel protocol (MPC+) . A configuration error may have occurred.

**Recommended Action** If this is not the case, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-CV\_CMGR\_FSM\_ERR: [chars]: Event [chars], State [chars]

**Explanation** An internal state machine has attempted to execute an event that is inconsistent with the state.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-CV\_PROT\_FSM\_ERR: [chars]: Event [chars], State [chars]

**Explanation** An internal state machine has attempted to execute an event that is inconsistent with the state.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-6-INIT: PA[dec] MPC [hex]-[hex] Device initialized

**Explanation** An MPC device has been initialized. The device string is in the form PAx MPC yyyy-zz, where x is the port adapter number, yyyy is the path, and zz is the device number.

**Recommended Action** No action is required.

**Error Message**

%MPC-3-LENGTH\_ERR: Inconsistent length in received MPC frame for TG [chars]

**Explanation** An MPC frame has been received with a length value that is inconsistent with the channel block length.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-6-LENGTH\_ERR\_DATA: Additional LENGTH\_ERR message data:  
[hex][hex][hex][hex][hex][hex][hex][hex]

**Explanation** This informational message immediately follows a LENGTH\_ERR\_INFO message if frame data exists.

**Recommended Action** Copy this message, along with the contents of the LENGTH\_ERR and LENGTH\_ERR\_INFO messages. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-6-LENGTH\_ERR\_INFO: Additional LENGTH\_ERR message info: currBfr [hex],  
msg\_length [hex]

**Explanation** This informational message immediately follows and amplifies a LENGTH\_ERR message.

**Recommended Action** Copy this message, along with the contents of the LENGTH\_ERR message, Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-6-LINK\_CONFIGURED: Link [chars] already configured

**Explanation** An attempt has been made to configure an MPC link that has already been configured.

**Recommended Action** No action is required.

**Error Message**

%MPC-6-NODE\_NOT\_ACTIVE: Host attempted activation of [chars] but TG not configured

**Explanation** A message has been received for an MPC link for which the transmission group has not been configured.

**Recommended Action** Configure the required TG. This process may require the host node or profile to be cycled down and up.

**Error Message**

%MPC-0-NOMEM: [chars] Attempt to acquire memory failed, pc: [hex], at [int]

**Explanation** A call to create a pool or get a buffer has failed.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-PARTNER\_CFG\_ERR: [chars]: [chars]

**Explanation** A configuration command has failed because the MPC partner linkage is not established.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-PARTNER\_FSM\_ERR: TG Name: [chars], Event [chars], State [chars]

**Explanation** An internal state machine has attempted to execute an event inconsistent with the state.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-6-SEQ\_NUM\_WRAP: Sequence number from host wrapped. TG name [chars]

**Explanation** The sequence number in a block from the host has wrapped.

**Recommended Action** No action is required.

**Error Message**

%MPC-6-SHUTDOWN: PA[dec] MPC [hex]-[hex] Device shutdown

**Explanation** An MPC device has been shut down. The device string is in the form PA $x$  MPC yyyy-zz, where  $x$  is the port adapter number, yyyy is the path, and zz is the device number.

**Recommended Action** No action is required.

**Error Message**

```
%MPC-3-SUBCH_FSM_ERR: PA[dec] MPC [hex]-[hex] Event [chars], State [chars]
```

**Explanation** An internal state machine has attempted to execute an event inconsistent with the state.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%MPC-3-SWEEP_FSM_ERR: TG Name: [chars], Event [chars], State [chars]
```

**Explanation** An internal state machine has attempted to execute an event inconsistent with the state.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%MPC-3-SWEEP_SEQ_ERROR: Sweep rcvd with seq num [hex], expected [hex]
```

**Explanation** An MPC sweep command has been received with a sequence number error.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%MPC-0-SYSMGT_ERROR1: MPC Subch detected error in sysmgt call: invalid CMPC DEVICE length
```

**Explanation** An invalid parameter has been received in a system management call.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%MPC-0-SYSMGT_ERROR2: MPC Subch detected error in sysmgt call: invalid operation [dec]
```

**Explanation** An invalid parameter has been received in a system management call.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-0-SYSMGT\_ERROR3: MPC L1cc-Tg detected error in sysmgt call: invalid operation [dec]

**Explanation** An invalid parameter has been received in a system management call.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-0-SYSMGT\_ERROR4: MPC L1cc-Tg detected error in sysmgt call: invalid CMPC DEVICE length

**Explanation** An invalid parameter has been received in a system management call.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-6-TOO\_MANY\_TGS: Cannot configure more than [dec] MPC TGs

**Explanation** This informative message has been given when an attempt is made to configure more than the maximum number of MPC TGs.

**Recommended Action** No action is required.

**Error Message**

%MPC-3-XID2\_BAD\_DATA: Invalid Xid2 Message: bad length or format

**Explanation** An MPC subchannel is in the XID2 exchange state, and the message received has a length that is not valid for an XID2 message segment.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MPC-3-XID2\_BAD\_HDR: Unrecognized Xid2 header received

**Explanation** An Xid2 frame has been received and with a header configuration that is not recognized.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%MPC-3-XID2_FSM_ERR: PA[dec] MPC [hex]-[hex] Event [chars], State [chars]
```

**Explanation** An internal state machine has attempted to execute an even that is inconsistent with the state.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## CMCC MSG802 Messages

The following are Channel Interface Processor (CIP) 802 error messages that are related to the IEEE 802.2cx Logical Link Control (LLC) protocol stack.

**Error Message**

```
%MSG802-3-ADAPTER_LIMIT_EXCEEDED: Configuration for adapter [dec] [enet] rejected ([chars])
```

**Explanation** An attempt was made to configure more than 18 CSNA adapters. A maximum of 18 CSNA adapters is allowed per CIP.

**Recommended Action** To comply with the 18 CSNA adapter limit, reduce the number of CSNA adapters configured.

**Error Message**

```
%MSG802-6-ADAPTER_OPEN: Adapter [chars]/[int] now open
```

**Explanation** Operability for the specified adapters that were brought up has been confirmed.

**Recommended Action** No action is required.

**Error Message**

```
%MSG802-6-ADAPTER_REM: Adapter [chars]/[int] now removed
```

**Explanation** The removal of each of the specified adapters has been confirmed.

**Recommended Action** No action is required.

**Error Message**

```
%MSG802-6-ADAPTER_UPD: Adapter [chars]/[int] LLC parm now altered
```

**Explanation** The changed LLC parameters for each of the specified adapters has been confirmed.

**Recommended Action** No action is required.



**Error Message**

%MSG802-6-BADNS\_WARN: INVALID NS detected [dec] times; tuning of LLC parameter may be needed !!!

**Explanation** The LLC protocol stack has received a bad frame that contains an “Invalid NS” message from its peer. Incorrectly configured LLC parameters may have occurred.

**Recommended Action** Reconfigure the LLC parameters of the CIP adapter and the peer.

**Error Message**

%MSG802-6-CTASET\_FAIL: set cta max\_conn [dec] failed ([dec] bytes free) - max conn remain at [dec]

**Explanation** In its current configuration, the CTA mapper for CSNA cannot accept the maximum number of connections because of insufficient memory. Any attempt to decrease the maximum number of connections will be rejected.

**Recommended Action** CSNA should be run on a CIP card with at least 32 MB of memory. Refer to the CIP CSNA configuration guide to determine the memory requirements for the maximum number of connections configured. Check the router configuration in the virtual interface of the CIP (x/2) MAX\_LLC\_CONNECTIONS parameter. Determine whether the device has been overconfigured. If over configuring the device is not the problem, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MSG802-6-DMA\_ABORT: DMA message consists of [dec] fragments with length of [dec]

**Explanation** The specified DLU send request has been aborted because it contained too many fragments or the fragments were too long.

**Recommended Action** If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MSG802-6-FLOW\_OFF\_COUNT: On [int], Off<30 [int], Off>30 [int], total [int], max off time [int] ms

**Explanation** This message provides statistics about flowed-off connections and may be preceded by a CTA-0-INACTIVE message.

**Recommended Action** No action is required.

**Error Message**

%MSG802-6-FLOW\_OFF\_INFO: Ran [hex], Ucep [hex], Pcep [hex], [int] ms, ccb [hex]

**Explanation** This message provides statistics about flowed-off connections and may be preceded by a CTA-0-INACTIVE message.

**Recommended Action** No action is required.

**Error Message**

%MSG802-6-FLOW\_OFF\_TERM: Terminating connection, RMAC=[hex].[hex].[hex]  
LMAC=[hex].[hex].[hex] RSAP=[hex] LSAP=[hex]

**Explanation** A connection has been terminated.

**Recommended Action** No action is required.

**Error Message**

%MSG802-6-FRAMESZ\_EXCEEDED: frame exceeded max size ([dec] bytes)

**Explanation** The MEMD buffer currently supports a maximum frame size of 4472 bytes. CSNA has detected that the specified frame exceeded the maximum size. The frame has been discarded.

**Recommended Action** Check the maximum frame length configured for the MEMD buffer.

**Error Message**

%MSG802-3-HARD\_ERROR: [chars]

**Explanation** The protocol stack has encountered error conditions that prevent it from continuing its normal operations. An error checking condition may have occurred.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MSG802-3-INVALID\_CFGCMD: invalid config cmd detected cmd=[dec]

**Explanation** The LLC task has detected an invalid configuration command. The command is rejected.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%MSG802-6-INVALID_ID: [chars]: invalid id type = [hex]
```

**Explanation** The LLC has received an invalid ID type that is not supported. The request is discarded.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%MSG802-3-INVALID_MSICMD: invalid msi cmd detected cmd=[dec]
```

**Explanation** The LLC task has detected an invalid MSI command. The request is discarded.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%MSG802-6-INVALID_PRIMITIVE: [chars]: invalid primitive code = [hex]
```

**Explanation** The LLC has received an invalid service primitive code. The error message will provide the service primitive code and identify the module and routine that had received it. This is not a fatal error, and the CSNA will continue to operate.

**Recommended Action** If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%MSG802-3-INVALID_VCN1: LAN not configured for vcn=[dec], adapter=[dec],
lan=[dec], ran=[dec] - cfg cmd rejected ([chars])
```

**Explanation** An attempt to process the specified configuration command has failed because an invalid VCN was detected. The configuration command is rejected.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%MSG802-3-INVALID_VCN2: LAN has configured for vcn=[dec], adapter=[dec],
lan=[dec], ran=[dec] - cfg cmd rejected ([chars])
```

**Explanation** An attempt to process the specified configuration command has failed because an invalid VCN was detected. The configuration command is rejected.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%MSG802-6-LLC_DUP_CCB: LLC Station : RMAC=[hex].[hex].[hex]
LMAC=[hex].[hex].[hex] LSAP=[hex] RSAP=[hex]
```

**Explanation** A request to open station has been received for a station address that already is open.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%MSG802-6-LLC_DUP_SAP: LLC Duplicate SAP on interface [int] : SAP=[hex], new
user([hex],[hex]) old user([hex],[hex])
```

**Explanation** The specified remote SAP has been opened by more than one XCA major node. The pair of values that follow old and new user in the message text are the USAP that identified the XCA major node that attempted to activate the MTU that was already in use.

**Recommended Action** Check the XCA node definitions.

**Error Message**

```
%MSG802-6-LLC_SHUT: LLC shutdown completed
```

**Explanation** The LLC has been shut down. The LLC DMA READ/WRITE task and the TIMER task have been shut down.

**Recommended Action** No action is required.

**Error Message**

```
%MSG802-6-LLC_START: Starting LLC-2 with a session capacity of [int]
```

**Explanation** The LLC subsystem has been brought up.

**Recommended Action** No action is required.

**Error Message**

```
%MSG802-6-MAX_FAILED: change max conn [dec] failed ([dec] bytes free) - max conn
remain at [dec]
```

**Explanation** In its current configuration, the CTA mapper for CSNA cannot accept the maximum number of connections because of insufficient memory. Any attempt to decrease the maximum number of connections will be rejected.

**Recommended Action** CSNA should be run on a CIP card with at least 32 MB of memory. Refer to the CIP CSNA configuration guide to determine the memory requirements for the maximum number of connections configured. Check the router configuration in the virtual interface of the CIP (x/2) MAX\_LL\_C\_CONNECTIONS parameter. Determine whether the device has been overconfigured. If the device has not been overconfigured, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MSG802-6-MAX\_FAILED2: cipmsg pool empty - max conn remain at [dec]

**Explanation** The CIP was not able to provide the maximum number of connections there were configured because it is unable to allocate a message buffer from the Multipath message pool.

**Recommended Action** Retry the **max\_llc** command. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MSG802-6-MAX\_LLC\_EXCEEDED: MAX\_LLC\_SESSIONS([int]) exceeded - [int] sessions rejected.

**Explanation** The maximum number of concurrent LLC connections has been exceeded.

**Recommended Action** Increase the MAX\_LLC\_SESSIONS parameter on the CIP virtual interface.

**Error Message**

%MSG802-6-NOMEM: Insufficient memory to initialize LLC - [chars]

**Explanation** The channel adapter does not have sufficient memory to initialize the LLC stack. The LLC stack will not be started.

**Recommended Action** Verify the amount of memory installed on the channel adapter and upgrade if necessary.

**Error Message**

%MSG802-3-QUEUE\_OPEN: [chars] ([chars])

**Explanation** The LLC task has detected a queue-open failure. The resource may not be available for this request.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MSG802-3-RESOURCE\_DEPLETED: [chars] ([chars])

**Explanation** The protocol stack has encountered error conditions that prevent it from continuing its normal operations. Possible errors include resource depletion.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MSG802-6-SHRINK\_CONN: reducing max\_conn doesn't take effect until the virtual interface is restarted - max conn remain at [dec]

**Explanation** An attempt has been made to reduce the maximum connection limit. This release of Cisco IOS software does not allow you to reduce the maximum connection limit.

**Recommended Action** No action is required.

**Error Message**

%MSG802-6-SHUT\_IN\_PROG: shutdown in progress ... [chars] command rejected

**Explanation** The LLC has entered a shutdown cleanup state. All configuration commands will be rejected.

**Recommended Action** Retry the command when the LLC has returned to an operational state.

**Error Message**

%MSG802-6-START802\_FAILED: unable to start 802 for [dec] connections - Memory Avail = [dec] bytes ([chars])

**Explanation** The CIP cannot bring up the CTA 802 task because of insufficient memory.

**Recommended Action** Check the maximum number of connections configured to see if CIP is overconfigured. If the Multipath is not overconfigured, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%MSG802-6-THRESHOLD: Connection threshold is set to accept maximum [dec] connections

**Explanation** The CSNA is currently configured to accept the maximum number of connections per user command.

**Recommended Action** No action is required.

**Error Message**

%MSG802-3-UNKNOWN\_EVENT: detect unknown event; event=[dec]

**Explanation** The LLC task has detected an unknown event.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%MSG802-3-UNSUPPORTED: [chars] ([chars])
```

**Explanation** The LLC task has detected a request for an unsupported function. The request will be ignored.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## CMCC NEVADA Messages

The following error messages are related to the Channel Interface Processor (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 an interrupt control chip. A fatal internal logic error has occurred.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

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

**Explanation** An attempt was made to disable an invalid interrupt type on an interrupt control chip. A fatal internal logic error has occurred.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

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

**Explanation** An attempt was made to enable an invalid interrupt type on an interrupt control chip. A fatal internal logic error has occurred.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

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

**Explanation** An attempt was made to enable an interrupt routine on an interrupt control chip, but no interrupt routine was specified. A fatal internal logic error has occurred.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**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. A fatal internal logic error has occurred.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**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 an interrupt control chip. A fatal internal logic error has occurred.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.



# CMCC OFFL Messages

The following Channel Interface Processor (CIP) error messages are related to the offload protocol.

## Error Message

```
%OFFL-6-ALIASNOTFOUND: Attempt to delete non-existing alias.
```

**Explanation** The specified alias does not exist on the offload device.

**Recommended Action** Make sure that the offload device has the alias you are trying to delete. If it does, copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

## Error Message

```
%OFFL-4-BADDESC: Socket descriptor [dec] in request is bad: state [chars] compare [dec]
```

**Explanation** The host sent a socket request with a socket descriptor that is invalid. The CMCC has sent an error response to this socket request. This could be a host error or a CMCC internal logic error.

**Recommended Action** This message is followed by a hex dump of the request. Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

## Error Message

```
%OFFL-0-BADSCB: Unknown SCB type [dec]
```

**Explanation** An internal logic error has occurred. An attempt was made to free a buffer with an unknown type.

**Recommended Action** This error message is typically followed by a fatal error dump with code 37. Capture all the error messages and issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%OFFL-3-BADSEQ: Socket request [chars] should be last in sequence

**Explanation** The host sent a socket request that should be the last in a sequence but is not. This error is caused either by an internal logic error or by an incompatibility between the offload code on the mainframe and the offload code on the CMCC. This message is followed by a hex dump of the request.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, call your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%OFFL-6-COMMAND: Unrecognized offload command code [dec]

**Explanation** The host sent an offload command with an invalid offload command code. The CMCC ignored the request.

**Recommended Action** Check to see if there were any special events that coincided with this error message, such as an IPL, a dropped session, channel errors, or any kind of debugging activity. Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, call your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%OFFL-6-DUPALIAS: Alias already exists on the offload device.

**Explanation** The offload device already has the specified alias.

**Recommended Action** Enter the **write terminal** command to verify that the alias exists. If it does not, copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, call your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%OFFL-7-HEX16B: [hex]: [hex][hex][hex][hex] [hex][hex][hex][hex]  
[hex][hex][hex][hex] [hex][hex][hex][hex] [chars]

**Explanation** This message contains a hex dump of data associated with the immediately preceding error message.

**Recommended Action** Refer to the description of the immediately preceding CMCC error message for the recommended action.

**Error Message**

```
%OFFL-7-HEX4W: [hex]: [hex] [hex] [hex] [hex] [chars]
```

**Explanation** This message contains a hex dump of data associated with the immediately preceding error message.

**Recommended Action** Refer to the description of the immediately preceding CMCC error message for the recommended action.

**Error Message**

```
%OFFL-3-ILLALD: Illegal data alignment: [hex] + [dec] bytes >= [hex]. xfer_element = [hex]
```

**Explanation** An internal logic error has occurred. The data following an offload message header crossed a buffer boundary. The CMCC ignored the message. This error message is usually an indication that the CMCC has received bad data. Examples of such bad data are CLAW frames that are duplicated or arrive out of order. The offload messages contained in these corrupted CLAW frames are ignored, and this action can lead to hanging sessions or session loss.

**Recommended Action** Check to see if there were any special events that coincided with this error message, such as an IPL, a dropped session, channel errors, or any kind of debugging activity. Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

```
%OFFL-3-ILLALH: Illegal hdr alignment detected. Address [hex] + [dec] bytes > [hex]. xfer_element = [hex]
```

**Explanation** An internal logic error has occurred. An offload message header crossed a buffer boundary. The CMCC ignored the message. This error message is usually an indication that the CMCC has received bad data. Examples of such bad data are CLAW frames that are duplicated or arrive out of order. The offload messages contained in these corrupted CLAW frames are ignored, and this action can lead to hanging sessions or session loss.

**Recommended Action** Check to see if there were any special events that coincided with this error message, such as an IPL, a dropped session, channel errors, or any kind of debugging activity. Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

```
%OFFL-3-ILLEN: Illegal byte count in offload data. [dec] specified, [dec]
available. xfer_element = [hex]
```

**Explanation** The buffer length field in the offload message header does not equal the size of the data buffer. This condition typically means that the mainframe has sent bad data to the offload device. Examples of such bad data are CLAW frames that are duplicated or arrive out of order. The offload messages contained in these corrupted CLAW frames are ignored, and this action can lead to hanging sessions or session loss.

**Recommended Action** Check to see if there were any special events that coincided with this error message, such as an IPL, a dropped session, channel errors, or any kind of debugging activity. Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

```
%OFFL-0-ILLFREE1: SCB chain does not end with a read hdr
```

**Explanation** An internal logic error has occurred. An attempt was made to free an incomplete sequence of buffers.

**Recommended Action** This error message is typically followed by a fatal error dump with code 37. Capture all the error messages and issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

```
%OFFL-0-ILLFREE2: SCB ends with a read hdr with the MTC bit set
```

**Explanation** An internal logic error occurred. An attempt was made to free an incomplete sequence of buffers.

**Recommended Action** This error message is typically followed by a fatal error dump with code 37. Capture all the error messages and issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%OFFL-3-ILLNUM: Illegal number of socket requests. Rejected at [dec]

**Explanation** The CMCC has received a CLAW frame with too many offload messages. This condition typically means that the mainframe has sent bad data to the offload device. Examples of such bad data are CLAW frames that are duplicated or arrive out of order. The offload messages contained in these corrupted CLAW frames are ignored, and this action can lead to hanging sessions or session loss.

**Recommended Action** Check to see if there were any special events that coincided with this error message, such as an IPL, a dropped session, channel errors, or any kind of debugging activity. Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%OFFL-3-ILLRST: Received restart with [dec] intf, [dec] is max. xfer\_element = [hex]

**Explanation** The host has sent an offload restart request with too many defined interfaces.

**Recommended Action** The CMCC has ignored the request. Check your host configuration for this offload device. If you cannot find the problem, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%OFFL-6-LONGREC: Attempt to transmit too large a record

**Explanation** The amount of data being read by the channel exceeded the size of the read channel command word. The CMCC freed the buffers associated with this read operation and continued.

**Recommended Action** This error message typically means that the host code and the CMCC code were out of synchrony on the read subchannel. Sometimes the condition corrects itself, but most of the time the subchannel has to be restarted, either by varying the device offline on the host or by unconfiguring and reconfiguring the affected offload device.

**Error Message**

%OFFL-3-MISRST: Received restart [chars] with unknown IP [dec].[dec].[dec].[dec]

**Explanation** The host has sent an offload restart request with an unknown IP address for the API link. The CMCC has ignored the mismatch.

**Recommended Action** Look for the DEVICE statement for the correct offload device in your TCPIP profile. Check the IP address on the LINK statement for the API link and compare that address with the IP address configured on the offload configuration command of your CMCC. Correct your configuration so the two IP addresses match.

**Error Message**

%OFFL-0-NOMBUF: Out of mbuf's for handling socket operations

**Explanation** An internal logic error has occurred. Not enough memory buffers were allocated to handle the current offload socket operation.

**Recommended Action** This error message is typically followed by a fatal error dump with code 37. Capture all the error messages and issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%OFFL-3-NOMEM: Not enough memory to start offload tasks

**Explanation** Not enough free memory is available to start the TCP/IP offload tasks. The configuration request was ignored.

**Recommended Action** Install more memory for the CMCC, or configure fewer devices.

**Error Message**

%OFFL-3-NOMEMSOCK: Not enough memory to process socket requests, [dec] open, [dec] in holddown

**Explanation** Not enough free memory is available to process a socket request. The socket request failed.

**Recommended Action** Install more memory for the CMCC, configure fewer devices, or limit the number of sessions through this offload device.

**Error Message**

%OFFL-3-NOMEMT: Insufficient memory ([chars]) for offload packet trace.

**Explanation** Not enough free memory is available for TCP/IP offload PKTTRACE. Tracing of a packet is skipped.

**Recommended Action** Refine (limit) the PKTTRACE option on the mainframe to reduce the number of packets being traced.

**Error Message**

%OFFL-0-NOPEND: Trying to free buffer when no send is pending. Operation: [dec]

**Explanation** An internal logic error has occurred. A request to free a send buffer was made even though there is no send pending.

**Recommended Action** This error message is typically followed by a fatal error dump with code 37. Capture all the error messages and issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%OFFL-6-OFFLNOTFOUND: No offload device found.

**Explanation** No offload device was found for the IP address for which an alias is being configured.

**Recommended Action** Make sure the offload address specified in the offload alias command matches an offload configuration command. If an offload device exists for the specified IP address, copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%OFFL-3-PENDREQ: Pending request [hex] deleted due to new request [hex]

**Explanation** The offload application had to save a socket request for later execution while another request of the same type was pending. The first request was dropped. This situation typically means that the mainframe has sent duplicate CLAW frames. Depending on what kind of offload message was duplicated, a variety of effects may follow, from nothing to session loss or even data corruption.

**Recommended Action** This error message is typically followed by a hex dump. Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%OFFL-3-REGERR: Register of offload PKTTRACE failed. Packet tracing skipped.

**Explanation** An internal error has occurred. The callback registry refused to add the offload tracing function to its list. The tracing of packets is skipped.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%OFFL-3-REQFORM: Socket request [dec] uses invalid parameters. Offset [dec]: [hex]

**Explanation** The host sent a socket request with an invalid parameter. The CMCC responded with an error code.

**Recommended Action** Check to see if there were any special events that coincided with this error message, such as an IPL, a dropped session, channel errors, or any kind of debugging activity. Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%OFFL-3-REQLEN: Socket request [dec] has wrong length [dec]

**Explanation** The host has sent a socket request with an incorrect length. The CMCC responded with an error code.

**Recommended Action** Check to see if there were any special events that coincided with this error message, such as an IPL, a dropped session, channel errors, or any kind of debugging activity. Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%OFFL-3-REQTYPE: Unknown [chars] socket request code [dec]

**Explanation** The host sent a socket request with an unknown type. An example could be an IOCTL request with a type code that is not implemented in the current release of CMCC microcode. The CMCC responded with an error code.

**Recommended Action** Check to see if there were any special events that coincided with this error message, such as an IPL, a dropped session, channel errors, or any kind of debugging activity. Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%OFFL-4-SENDERR: Bad serial number [hex] in send request - expected [hex]

**Explanation** The host sent a Send socket request that had an unexpected serial number in the header. This is most likely a bug on the host.

**Recommended Action** The CMCC sent an error response to the Send socket request. The host TCP/IP stack will probably print the error message, "Unexpected result from Offload device..." Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.



**Error Message**

%OFFL-4-SOCLEFT: [dec] Sockets found after shutdown

**Explanation** When the offload application quit, it detected sockets that were still waiting for cleanup. This is an internal logic error.

**Recommended Action** This message should be preceded by other error messages that provide further information. Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%OFFL-6-SOCREQ: Unrecognized socket request code [dec]

**Explanation** The host sent an offload socket request with an invalid request code. The CMCC responded with an error code. This error message can occur if a particular feature of the offload protocol is not supported by the current version of CMCC microcode. This error message can also occur if the CMCC has received bad data.

**Recommended Action** Check to see if there were any special events that coincided with this error message, such as an IPL, a dropped session, channel errors, or any kind of debugging activity. Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%OFFL-6-TOOMANYALIASES: Attempt to configure too many aliases.

**Explanation** An attempt to configure too many aliases has been rejected. The offload application allows eight aliases per offload device.

**Recommended Action** If the number of existing aliases is less than the allowed maximum, copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%OFFL-6-TRDISA: Offload PKTTRACE disabled.

**Explanation** The mainframe TCP/IP has disabled PKTTRACE tracing. This can occur because the GTF was terminated or because a NOTRACE command was issued.

**Recommended Action** No action is required.

**Error Message**

%OFFL-6-TRENAB: Offload PKTTRACE enabled.

**Explanation** The mainframe TCP/IP has enabled tracing using PKTTRACE.

**Recommended Action** No action is required.

**Error Message**

%OFFL-4-TRRESU: Pending trace packets now [dec], tracing resumed ([dec]).

**Explanation** The number of outstanding trace packets pending to go to the mainframe has reached an acceptable level. Tracing of packets is resumed now, but some packets received or sent by this offload device were not traced during the suspension. The number in parentheses is the count of how many times a suspend occurred. The number serves as a correlator to the suspend message.

**Recommended Action** No action is required.

**Error Message**

%OFFL-4-TRSUSP: Pending trace packet limit [dec] reached, tracing suspended ([dec]).

**Explanation** The limit of outstanding trace packets pending to go to the mainframe has been reached. Tracing of packets is suspended temporarily rather than continuing to flood the channel with trace data. Note: This means that some of the packets received or sent by this offload device will not be traced. The number in parentheses is the count of how many times suspend occurred. The number serves as a correlator to the resume message.

**Recommended Action** A message indicating the resumption of tracing will be seen when the congestion abates. No action is required; however, reducing the amount of tracing being done might minimize such suspensions.

**Error Message**

%OFFL-6-UNEXP: Unexpected offload command code [dec]

**Explanation** The host sent an offload command with an offload command code that cannot be handled by the CMCC. The CMCC ignored the request.

**Recommended Action** Check to see if there were any special events that coincided with this error message, such as an IPL, a dropped session, channel errors, or any kind of debugging activity. Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%OFFL-6-VIRTOFFL: Offload device may not be created on a virtual port adapter

**Explanation** An attempt was made to configure an offload device on the virtual port adapter. Offload devices are permitted on physical port adapters only.

**Recommended Action** The configuration request was ignored. No action required.

**Error Message**

%OFFL-6-WRCHAIN: Received too long message, xfer\_element [hex] chains to [hex]

**Explanation** The offload application received a message on the CLAW control link or the IP link that consisted of more than 16 CLAW buffers. This is not supported.

**Recommended Action** If this error is reproducible, copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%OFFL-6-WRITEREAD: Host Wrote data on read subchannel.

**Explanation** The mainframe has written data to the read subchannel. This is most likely the result of a misconfiguration under a VM guest in which the write device is attached to the read subchannel.

**Recommended Action** Check the device definitions on the host. If the system is running under VM, verify that the write device is attached to the write subchannel and the read device is attached to the read subchannel.

**Error Message**

%OFFL-0-WRONGFREE: Trying to free mbuf out of sequence

**Explanation** An internal logic error has occurred. An unexpected address was specified in a request to free a buffer.

**Recommended Action** This error message is typically followed by a fatal error dump with code 37. Capture all the error messages and issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

# CMCC PACK Messages

The following Channel Interface Processor (CIP) error messages are related to the packed extension to the Common Link Access to Workstation (CLAW) facility.

## Error Message

`%PACK-3-BADLEN: Invalid length in CLAW packed control message - act [dec], exp [dec]`

**Explanation** A control message was received under the packed CLAW link, and the length did not match that of a known packed control message.

**Recommended Action** Get a GTF and a channel trace to verify that the host is sending the bad packed message.

## Error Message

`%PACK-3-BADSCBQ: Found data queued with channel queue partially empty.`

**Explanation** After a packet was received, the packed driver detected that packed data was waiting to be queued even though the channel queue was partially emptied.

**Recommended Action** This is an internal logic error. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## Error Message

`%PACK-0-BADSIZE: Invalid size in connection request- [dec] R, [dec] W; defined - [dec] R [dec] W`

**Explanation** In a packed connection request, either a read size requested was smaller than the packed type defined or a write size requested was larger than the packed type defined.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## Error Message

`%PACK-0-BADSIZE2: Packed type names:"[chars]" - "[chars]"`

**Explanation** The specified packed type names have experienced a BADSIZE-PACK error.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%PACK-3-BADSTATE: Claw packed sublink [dec] is in an unknown state [dec].  
Path=[hex][hex][hex] device=[hex] link=[hex]

**Explanation** A packet was received from the host on a packed sublink for which the state was unknown. This is a logic error.

**Recommended Action** The packet was dropped. Report this error to your Cisco technical support representative.

**Error Message**

%PACK-0-BADTYPE: Host Packed names "[chars]" - "[chars]" do not match any configured names.

**Explanation** An attempt was made to establish a packed connection, but the packed type names specified on the host do not match any of the packed names specified in the CMCC.

**Recommended Action** Correct the host configuration or upgrade the CMCC microcode to a version that supports the packed type specified by the host.

**Error Message**

%PACK-0-BADTYPE2: Supported packed type names: "[chars]" - "[chars]"

**Explanation** An attempt was made to establish a packed connection, but the packed type names specified on the host do not match any of the packed names specified in the CMCC.

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

**Error Message**

%PACK-0-BADVERSION: Host CLAW Packing version [dec] does not equal CMCC version [dec].

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

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%PACK-6-COMMAND: Unrecognized CLAW packing control command code [dec].

**Explanation** The host has sent a CLAW packing control command with an invalid command code.

**Recommended Action** The CMCC has ignored the request. Get a GTF and a channel trace to verify that the host is sending the bad packed message.

**Error Message**

%PACK-6-CTLEERROR: Packed control error message received with return code of [dec].

**Explanation** The host rejected a previously received CLAW packed control message sent by the CMCC.

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

**Error Message**

%PACK-3-ILLEN: Not enough data left in buffer for packed message - remaining [dec], length [dec]

**Explanation** The host has written a block of packed messages, and the length of the block was inconsistent with the size of the packed messages.

**Recommended Action** Get a GTF and a channel trace to verify that the host is sending the bad packed messages.

**Error Message**

%PACK-3-ILLEN2: Received zero length packed message.

**Explanation** The host has written a block of packed messages, and the length of a packed message was zero. This is an invalid size.

**Recommended Action** Get a GTF and a channel trace to verify that the host is sending the bad packed message.

**Error Message**

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

**Explanation** A packet has been received from the host, but the packed sublink specified with the data does not represent a valid connection.

**Recommended Action** The packet was dropped. Report this error to your Cisco technical support representative.

**Error Message**

%PACK-0-NOLINKID: Unable to allocate sublink id for CLAW packing sublink.

**Explanation** An attempt was made to allocate a sublink ID to assign to a connection request, but all sublink IDs were in use. This error should not occur.

**Recommended Action** The CMCC has recovered by generating a bad return code to the requestor. Report this error to your Cisco technical support representative.

**Error Message**

%PACK-3-NOMBUF: Couldn't allocate a new MBUF from the CLAW Packing pool.

**Explanation** An attempt to allocate a new memory buffer from the CLAW packing pool has failed. This is a design error. There should always be enough memory buffers for packed CLAW data.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%PACK-3-NOMORE: Packed sublink [dec] doesn't support the more bit

**Explanation** The host sent a packet message with the "More" bit on, and the sublink to which the message was sent does not support the "More" bit.

**Recommended Action** Get a GTF and a channel trace to verify that the host is sending the bad packed message.

**Error Message**

%PACK-6-NOTPRESENT: CLAW Packing sublink [dec] being freed was not present.

**Explanation** The host software has attempted to disconnect a CLAW packing sublink that was not established.

**Recommended Action** The CMCC has ignored the request. Report this error to your Cisco technical support representative.

**Error Message**

%PACK-6-RANGE: CLAW packing sublink [dec] being freed is out of range.

**Explanation** An attempt to disconnect a CLAW packing sublink has failed because the CLAW packing sublink ID is not in the valid range for all CLAW packed sublinks.

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

**Error Message**

%PACK-6-RANGE2: Out of range sublink ([dec]) received in packed claw message.

**Explanation** The CLAW packing sublink ID in a packed message is not in the valid range for all CLAW packed sublinks.

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

**Error Message**

%PACK-0-SYSMGT\_ERROR1: CLAW detected error in sysmgt call: invalid CLAWPACK CONTROL length

**Explanation** An invalid parameter was received in a system management call.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%PACK-0-SYSMGT\_ERROR2: CLAW detected error in sysmgt call: invalid CLAWPACK SUBLINK length

**Explanation** An invalid parameter was received in a system management call.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%PACK-3-TOOBIG: Received packet [dec], packed header [dec], negotiated frame [dec], dropped the packet

**Explanation** The received packet together with the packed header is larger than negotiated CLAW read frame size, and the packet has been dropped.

**Recommended Action** Set the IP MTU to the negotiated CLAW frame size that is specified in the error message text, less 4 (for the CLAW packed header).

**Error Message**

%PACK-3-TOOLARGE: Received [dec] byte message on packed sublink [dec] - max is [dec].

**Explanation** The host has sent a packed message on a sublink that was larger than the write size negotiated during the Packed Connection Request sequence.

**Recommended Action** Get a GTF and a channel trace to verify that the host is sending the bad packed message.

## CMCC PCPA Messages

The CIP, CIP2, ECPA, ECPA4, and PCPA messages all use the same message format. For details on how to locate and interpret these messages, refer to [CMCC CIP and CIP2 Messages](#).



# CMCC PKTS Messages

The following are channel adapter error messages that are related to the packet switching API.

## Error Message

`%PKTS-3-BUFLEN: Zero length buffer detected in [chars] for [chars]([hex])`

**Explanation** An application buffer error has been detected in the channel adapter packet-switching API.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## Error Message

`%PKTS-3-CONSISTENCY: [chars] : [chars] [hex] [dec]`

**Explanation** A consistency error has been detected in the channel adapter packet-switching API.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## Error Message

`%PKTS-3-INIT: [chars] ([dec])`

**Explanation** The CMCC packet switching initialization has failed because of a lack of memory on the card. Packets will not be switched between the CMCC card and the Route Processor.

**Recommended Action** Verify that the amount of memory installed on the CMCC card is capable of supporting the configured CMCC microcode.

## Error Message

`%PKTS-3-NOSUPP: [chars] ([hex],[hex])`

**Explanation** An attempt was made to call a function in a packet-switching API control block that was not implemented or supported.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%PKTS-3-NOTREADY: packet switching API not initialized - [chars]
```

**Explanation** An attempt was made to call a function in a packet-switching API before the initialization of the API was complete.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%PKTS-3-SEGMENT: [chars] : [chars] [hex] [dec]
```

**Explanation** A data buffer containing too many segments or particles to transmit to the platform Route Processor was detected. The packet is being dropped.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## CMCC SCB Messages

The following Channel Interface Processor (CIP) error messages are related to the storage control block.

**Error Message**

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

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

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%SCB-6-RESUME: SCB on port [dec] available, correlator: [dec] task: [chars] [hex]
```

**Explanation** A task waiting for a channel SCB woke up. This message is typically preceded by the message, "SCB limit on port [dec] reached." The correlator value in this message and the following message indicate that the two messages form a pair. In most cases, the pair of messages indicates a burst of activity that resulted in an unusually long queue for the channel.

**Recommended Action** No action is required.

**Error Message**

```
%SCB-6-WAIT: SCB limit on port [dec] reached, correlator: [dec] task: [chars]
[hex]
```

**Explanation** A task tried to allocate a channel SCB when all blocks were in use. The task is now waiting for a block to become available. This message is typically followed by the message, “SCB on port [dec] available.” The correlator value in this message and the following message indicate that the two messages form a pair. In most cases, the pair of messages indicates a burst of activity that resulted in an unusually long queue for the channel.

**Recommended Action** If this message is followed by any kind of indication that the CIP has stopped working properly, report it to your Cisco technical support representative, along with the output of the **show extended channel / subchannel**, **show extended channel / statistics**, **show version**, **show running-config**, and **show controller cbus** commands. In addition, check the MVS syslog and the TCPIP job log (or equivalent for other mainframe operating systems) for unusual channel-related messages. Pay particular attention to anything related to TCP/IP offload.

## CMCC SCHED Messages

The following error messages are related to the multitasking scheduler, the facility that is responsible for determining which process to run at a given time on the Channel Interface Processor (CIP).

**Error Message**

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

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

**Recommended Action** Tasks get created either at CIP startup time or as a result of a configuration command. If this message was caused by a configuration command, the configuration command was rejected. If the error message was issued at CIP startup time, while system tasks were being created, the CIP may not be fully functional. Note the steps necessary to recreate the problem, copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

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

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

**Recommended Action** This error message is typically followed by a fatal error dump with code 37. Capture all the error messages and issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

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

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

**Recommended Action** This error message is typically followed by a fatal error dump with code 37. Capture all the error messages and issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%SCHED-0-NMLDATA: tcb\_addr = [hex] current\_tcb = [hex] lock\_value = [dec]

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

**Recommended Action** This error message is typically followed by a fatal error dump with code 37. Capture all the error messages and issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**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** This error message is typically followed by a fatal error dump with code 37. Capture all the error messages and issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

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

**Explanation** An attempt has been made to create one more task than the CIP is designed to allow. The task was not created.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, issue the **show tech-support** command, and provide the information to your Cisco technical support representative. If your running configuration shows that you are trying to use a supported number of configuration commands, the limit on the number of tasks on the CIP has to be increased.

**Error Message**

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

**Explanation** An attempt has been made to create a task, but sufficient memory was not available to contain the stack for the task. The task was not created.

**Recommended Action** If this message was caused by a configuration command, it is an indication that the CIP does not have enough memory to run it. Install more memory for the CIP, or configure fewer devices. If this message occurred at CIP startup time, it is an indication that the version of CIP microcode you are running is not supported on a CIP with the amount of memory you have installed. Install more memory for the CIP in this case.

**Error Message**

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

**Explanation** An attempt has been made to create a task, but sufficient memory was not available to contain the control block for the task. The task was not created.

**Recommended Action** If this message was caused by a configuration command, it is an indication that the CIP does not have enough memory to run it. Install more memory for the CIP, or configure fewer devices. If this message occurred at CIP startup time, it is an indication that the version of CIP microcode you are running is not supported on a CIP with the amount of memory you have installed. In this case, install more memory for the CIP.

**Error Message**

%SCHED-0-NOTMYLOCK: Attempt was made to unlock another task's resource

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

**Recommended Action** This error message is typically followed by a fatal error dump with code 37. Capture all the error messages and issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%SCHED-0-NOTPROCES: Attempt was made to lock while not at process level

**Explanation** An attempt has been made to lock a resource while not at the process level. This is a fatal internal logic error.

**Recommended Action** This error message is typically followed by a fatal error dump with code 37. Capture all the error messages and issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

# CMCC SLC Messages

The following Channel Interface Processor (CIP) error messages are related to the serial link controller.

## Error Message

```
%SLC-3-PCANMIRESET: Reset of Port [dec] NMI failed
```

**Explanation** After the serial link controller had serviced an NMI from a parallel PCA interface, the attempt to reset the interrupt failed.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## 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 has failed.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## 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 has failed.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## Error Message

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

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

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

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

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

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**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** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## CMCC SLCI Messages

The following Channel Interface Processor (CIP) error messages are related to the Signaling Link Code Interface (SLCI).

**Error Message**

`%SLCI-3-BAD_TYPE_CODE: PA[dec] MPC [hex]-[hex] got unrecognized xfer_list type code`

**Explanation** An MPC process has received a transfer list containing an unrecognized type code.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

`%SLCI-6-FLUSH: PA[dec] MPC [hex]-[hex] Read data flushed.`

**Explanation** Because of an error on the channel, some data that was intended to be sent to the channel has not been sent to the channel. The VTAM will receive an error indication and should retry the operation.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%SLCI-3-INBOUND_FSM_ERR: PA[dec] MPC [hex]-[hex] Event [chars], State [chars]
```

**Explanation** An internal state machine has attempted to execute an event that is inconsistent with the state.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%SLCI-3-INFLOW_FSM_ERR: PA[dec] MPC [hex]-[hex] Event [chars], State [chars]
```

**Explanation** An internal state machine has attempted to execute an event that is inconsistent with the state.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%SLCI-6-LONGREC: PA[dec] CTA [hex]-[hex] Attempt to transmit too large a record.
```

**Explanation** The amount of data being read by the channel has exceeded the size of the read channel command word.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%SLCI-0-NOMEM: Attempt to acquire memory by [chars] failed, pc: [hex], at [int]
```

**Explanation** A call to create a pool or get a buffer has failed.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%SLCI-0-STASH_EMPTY: Stash empty on read complete
```

**Explanation** A read operation has completed, but no data has been stashed.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.



## CMCC SSI802 Messages

The following Channel Interface Processor (CIP) SSI802 error messages are related to the Common Service System Service Interface (SSI) facility.

### Error Message

%SSI802-6-DUMP: [chars]

**Explanation** This message is used by the dump utility to display the hex dump of storage.

**Recommended Action** No action is required.

### Error Message

%SSI802-3-FATAL\_ERROR: SSI\_ASSERT failure in [chars] @ [int] - [chars]

**Explanation** The CSNA has encountered unrecoverable error conditions that prevent it from continuing normal operations.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

### Error Message

%SSI802-3-RTN\_ADR: Return Address: [hex]

**Explanation** This is a debug feature to show the return address when an ASSERT operation is used in an inline function.

**Recommended Action** Refer to the recommended action from the subsequent error.

## CMCC SUBSYS Messages

The following are software subsystem error messages.

### Error Message

%SUBSYS-2-BADCLASS: Bad subsystem clas ([dec]) - ignoring subsystem

**Explanation** A software consistency check has failed.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%SUBSYS-2-BADSEQUENCE: Subsystem ([chars]) has cross-class sequence for ([chars])

**Explanation** A software consistency check has failed.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%SUBSYS-2-BADVERSION: Bad subsystem version number ([dec]) - ignoring subsystem

**Explanation** A software consistency check has failed.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%SUBSYS-2-MAXRECUR: Too many levels of recursion

**Explanation** A software consistency check has failed.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%SUBSYS-2-MISMATCH: Kernel and subsystem version differ ([dec].[dec]) - ignoring subsystem

**Explanation** A software consistency check has failed.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%SUBSYS-2-NOTFOUND: Subsystem ([chars]) needs subsystem ([chars]) to start

**Explanation** A software consistency check has failed.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

# CMCC SYS Messages

The following are Channel Interface Processor (CIP) operating system error messages.

## Error Message

%SYS-3-BADBLOCK: Bad block pointer [hex]

**Explanation** A block of memory is corrupt at the specified location.

**Recommended Action** If this messages recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## Error Message

%SYS-3-BADFREEMAGIC: Corrupt free block at [hex] (magic [hex])

**Explanation** A block of memory is corrupt at the specified location.

**Recommended Action** If this messages recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## Error Message

%SYS-3-BADFREEPTRS: Bad [chars] pointer [hex] at [hex] ([chars] = [hex])

**Explanation** A pointer in the block header at the specified location is corrupt.

**Recommended Action** If this messages recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## Error Message

%SYS-3-BADMAGIC: Corrupt block at [hex] (magic [hex])

**Explanation** The free memory pool is corrupted.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%SYS-2-BADSHARE: Bad refcount in [chars], ptr=[hex], count=[hex]

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

**Recommended Action** If this messages recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%SYS-6-BLKINFO: [chars]blk [hex], words [int], alloc [hex], [chars], dealloc [hex], rfcnt [hex]

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

**Recommended Action** If this messages recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%SYS-3-CACHE\_DIRTY\_ADR: cache line [hex] dirty, task: [chars]

**Explanation** This error message reports the address at which a scan cache operation detected that the cache had not been flushed as expected.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%SYS-6-CACHE\_DIRTY\_MSG: [chars][chars]

**Explanation** This message provides additional information about the CACHE\_DIRTY\_ADR message.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%SYS-3-CACHED\_PAGE\_ADR: Uncached page pointer [hex] in call to return\_page\_inline

**Explanation** The pointer to a page being returned to the page pool was a cached address.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%SYS-2-FREEBAD: Attempted to free memory at [hex], not part of buffer pool

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

**Recommended Action** If this messages recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%SYS-2-FREEFREE: Attempted to free unassigned memory at [hex], alloc [hex], dealloc [hex]

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

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

**Error Message**

%SYS-3-INUSEFREE: Block [hex] on free list [dec] in use

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

**Recommended Action** If this messages recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%SYS-3-INVMEMINT: Invalid memory action ([chars]) at interrupt level

**Explanation** A memory allocation or deallocation has been attempted from an interrupt handler.

**Recommended Action** If this messages recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%SYS-2-LOWMEM: Low memory debug exception (limit=[int] free=[int])

**Explanation** The CIP is running short of memory.

**Recommended Action** It may be necessary to free some memory by exiting a program. If this messages recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%SYS-2-MEMTOOSMALL: CIP software requires a minimum of 8MB of DRAM

**Explanation** The CIP software has become large enough that it will not run with only 2 MB of DRAM.

**Recommended Action** Contact your Cisco support representative for a free 8-MB upgrade.

**Error Message**

%SYS-6-MTRACE: [chars]: addr,pc\n [hex],[hex] [hex],[hex] [hex],[hex]  
[hex],[hex]\n [hex],[hex] [hex],[hex] [hex],[hex] [hex],[hex]

**Explanation** The free memory pool is corrupted.

**Recommended Action** If this messages recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%SYS-2-NOMEMFRG: Memory fragmentation check debug exception (fragment size [int])

**Explanation** The system has detected an error while checking memory fragmentation.

**Recommended Action** If this messages recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**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-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 messages recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%SYS-3-OVERRUN: Block overrun at [hex] (redzone [hex])

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

**Recommended Action** If this messages recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%SYS-5-RELOAD: Reload requested

**Explanation** A reload or restart has been requested.

**Recommended Action** No action is required.

**Error Message**

%SYS-5-RESTART: System restarted --\n[chars]

**Explanation** A reload or restart has been requested.

**Recommended Action** No action is required.

**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 messages recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## CMCC SYSMGT\_EVENT Messages

The following are system management event error messages.

**Error Message**

%SYSMGT\_EVENT-4-ERROR: [chars] - [chars]([chars])

**Explanation** The system management event-sending operation has failed. Traps, alerts, and console messages for a channel event will not be generated.

**Recommended Action** If this messages recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

# CMCC SYSMGT\_RPC Messages

The following are error messages that relate to network management processing for system management remote-procedure call (RPC) operation.

## Error Message

`%SYSMGT_RPC-3-ERROR: Error detected ([chars])`

**Explanation** A system error involving the system management RPC operation has been detected.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## Error Message

`%SYSMGT_RPC-3-IPC_ERROR: [chars] [chars] failed ([chars])`

**Explanation** A system management RPC operation has failed. A request for information from the channel adapter card will not be processed.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## Error Message

`%SYSMGT_RPC-3-NOMEM: [chars]`

**Explanation** The channel adapter system management subsystem could not be initialized because of lack of memory available on the channel adapter. Since the channel adapter SYSMGT component was unable to be initialized, most **show extended channel** command information and all channel adapter event notifications will be unavailable to the user.

**Recommended Action** Upgrade the channel adapter with more memory.

## Error Message

`%SYSMGT_RPC-6-STATE_CHANGE: System Management [chars]`

**Explanation** The channel adapter system management subsystem has changed state.

**Recommended Action** No action is required.



**Error Message**

```
%SYSMT_RPC-4-UNKNOWN: [chars] request for class [dec] contains unknown [chars]
[dec]
```

**Explanation** The channel microcode has received a system management request (clear or query) on this port with an unknown code.

**Recommended Action** Check your microcode version to ensure that it is compatible with the installed version of Cisco IOS software.

## CMCC TCPIP Messages

The following are error messages that relate to the TCP/IP protocol.

**Error Message**

```
%TCPIP-0-PANIC: panic[[chars]@[dec]] in [chars]: [chars]
```

**Explanation** An unexpected internal error has occurred in the TCP/IP stack.

**Recommended Action** Check to see if there were any special events that coincided with this error message, such as an IPL, a dropped session, channel errors, or any kind of debugging activity. Copy the error message exactly as it appears, issue the **show tech-support** command, and provide the information to your Cisco technical support representative.

## CMCC TN3270S Messages

The following error messages relate to the TN3270 server terminal emulation feature of the Channel Interface Processor (CIP) card.

**Error Message**

```
%TN3270S-1-ADJUST_POOL_FAILED: A TN3270 server related buffer pool could not be
adjusted
```

**Explanation** The size of an important buffer pool could not be increased. This error is due to either insufficient memory on the board or an internal code error.

**Recommended Action** This error is most probably due to insufficient memory. Upgrade your board with additional memory. If you believe there is sufficient memory, it is possible that there is a memory leak. Report details of your configuration, output of the **show controller cxbus** command, and any action needed to reproduce this problem to your Cisco technical support representative.

**Error Message**

%TN3270S-6-AVL\_INSERT\_FAILED: An AVL Insert failed in [chars]

**Explanation** An attempt to add information to the AVL tree has failed. This is an indication of an internal program logic error.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%TN3270S-6-BADCIRCBUF: CopyCmd failure. bufsize=[dec],Length=[dec],Index=[dec],  
 \n CircBuf=  
 [hex][hex][hex][hex][hex][hex][hex][hex][hex][hex][hex][hex][hex][hex][hex][hex]

**Explanation** A Copy Command call has failed because a write operation calculated a buffer length of zero. The session for which the write was intended will be terminated. An internal program logic error has occurred.

**Recommended Action** It is important to report this problem to your Cisco technical support representative because it reflects an internal program logic error.

**Error Message**

%TN3270S-4-BAD\_MAX\_LUS\_CFG: Could not change maximum LUs to [dec]

**Explanation** The TN3270 server could not change the maximum number of LUs to the requested value. The previous number is still in use.

**Recommended Action** Review the previous error messages to discover what caused the failure, and take action based on those messages.

**Error Message**

%TN3270S-6-BADTIMER: Bad timer  
 operation([dec]),ra=[hex],funcPtr=[hex],oldFuncPtr=[hex]

**Explanation** A bad timer operation was detected and aborted. The rest of the information given is useful only to developers to debug the problem. Such bad-timer occurrences are usually harmless but are reported because they may accompany a more serious problem.

**Recommended Action** It is important to report this problem to your Cisco technical support representative because it reflects an internal program logic error.

**Error Message**

%TN3270S-6-CONFLICTING\_LU\_SEEDS: The lu-seed conflicts with the lu-seed of [chars]

**Explanation** The LU-seed is generating illegally duplicated LU names. For example, lu-seed ABC### and lu-seed ABC1## both generate LU name ABC101. The current PU definition has been rejected.

**Recommended Action** Use another LU-seed to define the current PU.

**Error Message**

%TN3270S-1-CREATE\_MUXWAIT\_FAILED: A TN3270 server related semaphore could not be created.

**Explanation** An important semaphore could not be created. This failure is due to either memory shortage or some internal code error.

**Recommended Action** This error is most probably due to insufficient memory. Upgrade your board with additional memory. If you believe there is sufficient memory, it is possible that there is a memory leak. Report details of your configuration, output of the **show controller cxbus** command, and any action needed to reproduce this problem to your Cisco technical support representative.

**Error Message**

%TN3270S-1-CREATE\_POOL\_FAILED: A TN3270 server related buffer pool could not be created.

**Explanation** An important buffer pool could not be created. This failure is due to either memory shortage or some internal code error.

**Recommended Action** This error is most probably due to insufficient memory. Upgrade your board with additional memory. If you believe there is sufficient memory, it is possible that there is a memory leak. Report details of your configuration, output of the **show controller cxbus** command, and any action needed to reproduce this problem to your Cisco technical support representative.

**Error Message**

%TN3270S-1-CREATE\_THREAD\_FAILED: A TN3270 server related thread could not be started

**Explanation** An important thread could not be created. This failure is due to either a memory shortage or some internal code error.

**Recommended Action** This error is most probably due to insufficient memory. Upgrade your board with additional memory. If you believe there is sufficient memory, it is possible that there is a memory leak. Report details of your configuration, output of the **show controller cxbus** command, and any action needed to reproduce this problem to your Cisco technical support representative.

**Error Message**

%TN3270S-4-DDDLU\_NOT\_SUPPORTED: Host does not support dddlu at IP addr [chars], port [dec]

**Explanation** The TN3270 server cannot complete one or more connection requests from a TN3270/E client because the host does not support DDDL U.

**Recommended Action** Check that all PUs configured for use with DDDL U have the LUGROUP operand defined. Also check that the specified VTAM LUGROUP major node is active.

**Error Message**

%TN3270S-1-DNS\_NAIL\_LOOKUP\_FAILED: A connection attempt from client ([chars]) was refused because its DNS name could not be obtained, error code = [dec].

**Explanation** The TN3270 server had to do a DNS lookup because Inverse DNS Nailing is configured, but the lookup failed. Since the TN3270 server could not be determined if the client is nailed, the client was disconnected.

**Recommended Action** Configure a DNS server or remove the Inverse DNS Nailing configuration.

**Error Message**

%TN3270S-1-DNS\_NAIL\_NO\_SERVER: A connection attempt from client ([chars]) was refused because a DNS server is not configured.

**Explanation** The TN3270 server had to do a DNS lookup because Inverse DNS Nailing is configured, but the lookup failed. Since it could not be determined if the client is nailed, it was disconnected.

**Recommended Action** Configure a DNS server or remove the Inverse DNS Nailing configuration.

**Error Message**

%TN3270S-1-DNS\_NAIL\_NOT\_FOUND: Deletion of the Client Name ([chars]) LU Nailing first ([dec]) to last ([dec]) failed because the configuration was not found.

**Explanation** The deletion of the Client IP LU **nailing** command has failed because the configuration could not be found.

**Recommended Action** No action is required.

**Error Message**

%TN3270S-1-DNS\_NAIL\_QUERY\_TIMED\_OUT: A connection attempt from client ([chars]) was refused because no response was received from the DNS server.

**Explanation** The TN3270 server had to do a DNS lookup because Inverse DNS Nailing is configured, but the lookup failed. Since it could not be determined if the client is nailed, it was disconnected.

**Recommended Action** Verify that the DNS server is operating correctly.

**Error Message**

%TN3270S-1-DNS\_NAIL\_QUEUE\_ERROR: An internal queueing error occurred, error code = [dec].

**Explanation** The TN3270 server had to do a DNS lookup because Inverse DNS Nailing is configured, but the response could not be matched with an outstanding query. An internal program logic error has occurred.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%TN3270S-1-DNS\_NAIL\_SERVER\_UNREACHABLE: A connection attempt from client ([chars]) was refused because the DNS server is unreachable.

**Explanation** The TN3270 server had to do a DNS lookup because Inverse DNS Nailing is configured, but the lookup failed. Since it could not be determined if the client is nailed, it was disconnected.

**Recommended Action** Troubleshoot the route to the DNS server.

**Error Message**

%TN3270S-4-FUNC\_NEGOT\_LOOP: Client [chars]:[dec] in loop on TN3270E function negotiation [dec].

**Explanation** The client software is not behaving as specified by the RFC requirements.

**Recommended Action** Try to locate the TN3270 client that caused the problem. There could be a bug in the client.

**Error Message**

%TN3270S-0-ILLEGAL\_CCMUTEX\_RELEASE: Releasing unacquired semaphore, lock\_held [hex] lock\_value [hex] ccMutex tcb [hex] thread tcb [hex]

**Explanation** An exclusive lock is being released illegally by an executing thread. The lock is held either by no one or by some other thread.

**Recommended Action** Reload the CIP. Since this problem is very serious, the error might recur. In any case, send the output of this message and tasks on the CIP console to your Cisco technical support representative. Also send information about your configuration and any action required to reproduce this problem.

**Error Message**

%TN3270S-4-ILLEGAL\_SUBOPTION: Client [chars]:[dec] sent Telnet suboption [dec] illegally.

**Explanation** The TN3270 client software is not behaving as specified by the RFC requirements.

**Recommended Action** Try to locate the TN3270 client that caused the problem. There could be a bug in the client.

**Error Message**

%TN3270S-6-INVALID\_RESOURCE\_LENGTH: Resource name length [chars] is greater than 8 bytes

**Explanation** The resource name has a length greater than the prescribed maximum length, which is 8 bytes. This is an indication of an internal program logic error.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%TN3270S-1-LISTENFAIL: Listening on [hex] [dec] Failed; err [dec]
```

**Explanation** An attempt was made to bring up a PU, but listening on the corresponding TCP/IP port could not be started.

**Recommended Action** Ensure that there is sufficient memory on the CIP card. If insufficient memory is not the problem, report this message to your Cisco technical support representative.

**Error Message**

```
%TN3270S-2-LOW_MEM: Insufficient memory for TN3270 server, [dec] KBytes available,
[dec] required
```

**Explanation** Insufficient memory is preventing proper operation of the TN3270 server.

**Recommended Action** Make sure there is enough memory available. Upgrade the memory on board or cancel other services running on the CIP. If you believe there is sufficient memory, it is possible that there is a memory leak. Report details of your configuration, output of the **show controller cxbus** command, and any action needed to reproduce this problem to your Cisco technical support representative.

**Error Message**

```
%TN3270S-1-LU_ERROR: lu error [chars]: [chars]:[dec] pu:[hex], tnet:[hex]
```

**Explanation** An unexpected event was presented to the LU named by the LOCADDR and PU. The error may cause the TN3270 session to work improperly. More detail on this error is contained in the LU\_ERROR\_INFO messages immediately following this message.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%TN3270S-1-LU_ERROR_INFO: LU info: Event [chars], state = [hex], snaState = [hex],
flag = [hex]
```

**Explanation** An internal software error has occurred. This message provides information about LU state, history, and flags that were present before the error occurred.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%TN3270S-1-LU_NO_BUFFER: No buffer for lu: [chars]
```

**Explanation** Some preallocated LU buffer space for transmissions has run out. The transmission of the message is aborted. The LU session is left incomplete. In addition, the LU session could hang.

**Recommended Action** Use **show** commands to find out as much about the LU state as possible and report the findings to your Cisco technical support representative.

**Error Message**

```
%TN3270S-6-LU_THRESHOLD: \n Warning: TN3270 sessions are at [dec]% of
maximum-lus\n
```

**Explanation** The number of LU sessions is approaching the configured limit.

**Recommended Action** No action is required.

**Error Message**

```
%TN3270S-1-MEMORY_SHORTAGE: Insufficient memory on board; failed to allocate [dec]
bytes
```

**Explanation** Memory could not be allocated for an important operation.

**Recommended Action** Upgrade your board with additional memory. If you believe there is sufficient memory, it is possible that there is a memory leak. Report details of your configuration, output of the **show controller cxbus** command, and any action needed to reproduce this problem to your Cisco technical support representative.

**Error Message**

```
%TN3270S-1-NAIL_NOT_FOUND: Deletion of the Client IP ([chars]) LU Nailing first
([dec]) to last ([dec]) failed because the configuration was not found.
```

**Explanation** Deletion of the Client IP LU **nailing** command has failed because the command could not be found.

**Recommended Action** No action is required.

**Error Message**

```
%TN3270S-1-NegRsp_NO_CORRELATOR: TN3270E negative response correlation:
[chars].[dec], client IP addr [chars],nextSqn=[dec],rspSqn=[dec]
```

**Explanation** A TN3270E client has sent a negative response to a TN3270 request sent previously by the server. The negative response does not have a sequence number that can be correlated to a TN3270 request sent by the server.

**Recommended Action** Determine the DLOGMOD used for the session. Review the outbound pacing bits used for this session and ensure that the pacing value is no bigger than 4. If the problem persists, contact the client software vendor and file a problem report.

**Error Message**

%TN3270S-3-NO\_BIND\_REQ\_RCVD: No BIND REQ received on LU [chars].[dec]

**Explanation** Either a BIND REQUEST or SSCP-LU data was expected (but not received) from the host within 30 seconds of the start of the SSCP-LU session for this TN3270 session. If this condition persists for another two minutes, the LU is declared bad. Bad dynamic LUs will not be reused until all good dynamic LUs associated with the IP listening point are in use.

**Recommended Action** Examine the SSCP host VTAM console for the status of the specified PU and LU. Review VTAM console log output for relevant events, such as deactivation of the PU or LU. If, after VTAM console review, the cause is still unknown, report this error to your Cisco technical support representative. A temporary workaround is to simply recycle the affected LU at the VTAM console. This will put the LU back into normal circulation.

**Error Message**

%TN3270S-3-NO\_DYN\_ACTLU\_REQ\_RCVD: No ACTLU REQ received on LU [chars].[dec]

**Explanation** The host has not sent an ACTLU REQUEST within 30 seconds of sending a Reply-PSID RSP. If this condition persists for another two minutes, the TN3270 session currently connected to the LU is disconnected. Bad dynamic LUs will not be reused until all good dynamic LUs associated with the IP listening point are in use.

**Recommended Action** Examine the SSCP host VTAM console for the status of the specified PU and LU. Review the VTAM console log output for relevant events, such as deactivation of the PU or LU. If, after VTAM console review, the cause is still unknown, report this error to your Cisco technical support representative. As a temporary workaround, recycle the affected LU at the VTAM console. This action will put the LU back into normal circulation.

**Error Message**

%TN3270S-1-NO\_EVENT\_BUFS: No IPC sysmgt event buffers for at least one minute

**Explanation** The TN3270 server has events that will result in SNMP traps and SNA alerts, but it has not been able to allocate IPC buffer resources to report the events to the router system code. The TN3270 server will continue to try to report these events, but lack of buffers may continue until reload of the CIP microcode.

**Recommended Action** Report this problem to your Cisco technical representative. Include output from the following commands: **show ipc status**, **show ipc queue**, **show ipc ports**, **show ipc nodes**, **show controller cbus**, and **show version**. As a workaround, reload the CIP microcode.

**Error Message**

%TN3270S-1-NO\_LU\_MEMORY: No memory on the CIP was available for completing a requested TN3270 LU session

**Explanation** The memory available to the TN3270 server is insufficient to complete one or more requests by TN3270/E clients for LU sessions. The sessions have been disconnected.

**Recommended Action** Review the memory required to run the TN3270 server application in light of the current client load. Install additional memory if necessary.



**Error Message**

%TN3270S-4-NO\_LU\_SESSIONS: Client session [chars]:[dec] requested a generic LU from IP [chars]:[dec], but no LU is available.

**Explanation** The TN3270 server cannot complete one or more connection requests from a TN3270/E client because there are no more available LUs left in the generic pool associated with the specified IP listening-point address.

**Recommended Action** Review the LU requirements for endpoints of this application. Configure additional PUs listening at the specified IP address and port number.

**Error Message**

%TN3270S-1-NO\_NAIL\_MEMORY: Insufficient memory available on the cip for Client IP LU Nailing

**Explanation** Insufficient memory is available to process the Client IP LU **nailing** command on the CIP.

**Recommended Action** No action is required.

**Error Message**

%TN3270S-6-NON\_E\_IPADDR\_ELEMENT\_NOT\_FOUND: Deletion of the tn-parameter IP ([chars]) value ([dec]) command failed because \n the configuration was not found.

**Explanation** Deletion of the **tn-parameter** command has failed because the command could not be found. This is an indication of an internal program logic error.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

%TN3270S-3-NO\_NOTIFY\_AV\_RSP\_RCVD: No NOTIFY(available) RSP received on LU [chars].[dec]

**Explanation** No response to a power-on (available) notify request was received by the TN3270 server within 30 seconds of sending it to the host. If this condition persists for another two minutes, the current TN3270 session connected to the LU will be disconnected. Bad dynamic LUs will not be reused until all good dynamic LUs associated with the IP listening point are in use.

**Recommended Action** Examine the SSCP host VTAM console for the status of the specified PU and LU. Review the VTAM console log output for relevant events, such as deactivation of the PU or LU. If, after VTAM console review, the cause is still unknown, report this error to your Cisco technical support representative. As a temporary workaround, recycle the affected LU at the VTAM console. This action will put the LU back into normal circulation.

**Error Message**

%TN3270S-3-NO\_NOTIFY\_UA\_RSP\_RCVD: No NOTIFY(UA) RSP received on LU [chars].[dec]

**Explanation** No response to a power-off (unavailable) notify request was received by the TN3270 server within 30 seconds of sending it to the host. If this condition persists for another two minutes, the current TN3270 session connected to the LU will be disconnected. Bad dynamic LUs will not be reused until all good dynamic LUs associated with the IP listening-point are in use.

**Recommended Action** Examine the SSCP host VTAM console for the status of the specified PU and LU. Review the VTAM console log output for relevant events, such as deactivation of the PU or LU. If, after VTAM console review, the cause is still unknown, report this error to your Cisco technical support representative. As a temporary workaround, recycle the affected LU at the VTAM console. This action will put the LU back into normal circulation.

**Error Message**

%TN3270S-3-NO\_PSID\_RSP\_RCVD: No NMVT Reply PSID received on LU [chars].[dec]

**Explanation** No response to a reply PSID was received by the TN3270 server within 30 seconds of sending it to the host. This fault can occur only on dynamic LUs that have been misconfigured or deactivated at the host. If this condition persists for another two minutes, the current TN3270 session connected to the LU will be disconnected. Bad dynamic LUs are placed in a special area where no attempt to reuse them is made until all other generic-pool LUs of the IP listening have been exhausted.

**Recommended Action** Check the status of the LU through the VTAM, and vary the LU active if appropriate. This action must happen within two minutes of the time this message appears; otherwise, the LU is placed in the "bad" LU area and will not be reused unless all good LUs are in use. Examine the host VTAM log for trouble. In particular, look for messages indicating a badly configured LUGROUP resource definition or file. Fix the configuration and recycle the affected major nodes.

**Error Message**

%TN3270S-3-NO\_SDT\_REQ\_RCVD: No SDT REQ received on LU [chars].[dec]

**Explanation** No SDT (Start Data Transfer) REQ was received by the TN3270 server from the PLU host for the specified LU. If the condition persists for another two minutes, the LU is declared bad. Bad dynamic LUs will not be reused until all good dynamic LUs associated with the IP listening point are in use.

**Recommended Action** Examine the SSCP host VTAM console for the status of the specified PU and LU. Review the VTAM console log output for relevant events, such as deactivation of the PU or LU. If, after VTAM console review, the cause is still unknown, report this error to your Cisco technical support representative. As a temporary workaround, recycle the affected LU at the VTAM console. This action will put the LU back into normal circulation.

**Error Message**

%TN3270S-3-NO\_SDT\_TMARK\_RCVD: No SDT TIMING-MARK received on LU [chars].[dec]

**Explanation** No SDT (Start Data Transfer) TIMING-MARK response was received by the TN3270 server from the TN3270 client software for the specified TN3270 session. If this condition persists for another two minutes, the LU will be declared bad. Bad dynamic LUs will not be reused until all good dynamic LUs associated with the IP listening point are in use.

**Recommended Action** Some TN3270 clients may not fully handle the TN3270 RFCs. Enable the client-side trace to figure out what the client is failing on. Replace the failing client software with software from the list of TN3270 software types that are known to work with the TN3270 server (see your Cisco technical support representative for this). If the problem persists, report this error to your Cisco technical support representative.

**Error Message**

%TN3270S-6-NOSESSHNDL: TN negotiation complete, but no handle for session [dec].

**Explanation** The TN negotiation complete routine was called, but no LU has been assigned to the session (socket). The session will be terminated. A bad-timer operation was detected and aborted. The rest of the information is useful only to developers to debug the problem. Such bad-timer occurrences are usually harmless, but are reported because they may accompany a more serious problem.

**Recommended Action** It is important to report this problem to your Cisco technical support representative because it reflects an internal program logic error.

**Error Message**

%TN3270S-3-NO\_TERMSELF\_RSP\_RCVD: No TERMSELF RSP received on LU [chars].[dec]

**Explanation** No response to a TERMSELF request was received by the TN3270 server within 30 seconds of sending the request to the host. If this condition persists for another two minutes, the current TN3270 session connected to the LU will be disconnected. Bad dynamic LUs will not be reused until all good dynamic LUs associated with the IP listening point are in use.

**Recommended Action** Examine the SSCP host VTAM console for the status of the specified PU and LU. Review the VTAM console log output for relevant events, such as deactivation of the PU or LU. If, after VTAM console review, the cause is still unknown, report this error to your Cisco technical support representative. As a temporary workaround, recycle the affected LU at the VTAM console. This action will put the LU back into normal circulation.

**Error Message**

%TN3270S-3-NO\_UNBIND\_RSP\_RCVD: No UNBIND RSP received on LU [chars].[dec]

**Explanation** No response to an UNBIND request was received by the TN3270 server within 30 seconds of sending the request to the host. If this condition persists for another two minutes, the current TN3270 session connected to the LU will be disconnected. Bad dynamic LUs will not be reused until all good dynamic LUs associated with the IP listening point are in use.

**Recommended Action** Examine the SSCP host VTAM console for the status of the specified PU and LU. Review the VTAM console log output for relevant events, such as deactivation of the PU or LU. If, after VTAM console review, the cause is still unknown, report this error to your Cisco technical support representative. As a temporary workaround, recycle the affected LU at the VTAM console. This action will put the LU back into normal circulation.

**Error Message**

%TN3270S-3-NO\_UNBIND\_TMARK\_RCVD: No UNBIND-time TIMING-MARK received from client for LU [chars].[dec]

**Explanation** No UNBIND TIMING-MARK response was received by TN3270 server from the TN3270 client software for the specified TN3270 session. If this condition persists for another two minutes, the LU will be declared bad. Bad dynamic LUs will not be reused until all good dynamic LUs associated with the IP listening point are in use.

**Recommended Action** Some TN3270 clients may not fully handle the TN3270 RFCs. Enable the client-side trace to figure out what the client is failing on. Replace the failing client software with software from the list of TN3270 software types that are known to work with TN3270 server (see your Cisco technical representative for this). If the problem persists, report this error to your Cisco technical support representative.

**Error Message**

%TN3270S-6-NOWRBUFR: Allocation failed for TCP write buffer, session [dec], [dec] supposedly on queue.

**Explanation** A CopyCmd or MsgQueRemoveFirst call failed to produce a memory buffer for a TCP write operation. However, prior checks had shown available buffers on the free queue. The session for which the write was intended will be terminated.

**Recommended Action** It is important to report this problem to your Cisco technical support representative because it reflects an internal program logic error.

**Error Message**

%TN3270S-6-PARAMETERINIT: An Invalid parameter registry code [dec]

**Explanation** During the TN3270 initialization, the supported tn-parameter codes have registered a routine. This routine will be used to process the configuration command. In this case an incorrect code was used. This is an indication of an internal program logic error.

**Recommended Action** It is important to report this problem to your Cisco technical support representative because it reflects an internal program logic error.

**Error Message**

`%TN3270S-1-POOL_NOT_FOUND: Could not find the Pool [chars]`

**Explanation** The search routines could not find this pool in the AVL tree. This message is usually the consequence of another problem. This is an indication of an internal program logic error.

**Recommended Action** It is important to report this problem to your Cisco technical support representative, because it reflects an internal program logic error.

**Error Message**

`%TN3270S-1-PROFILE_NOT_FOUND: Could not find the Profile [chars]`

**Explanation** The search routines could not find this profile in the AVL tree. This message is usually the consequence of another problem. This is an indication of an internal program logic error.

**Recommended Action** It is important to report this problem to your Cisco technical support representative because it reflects an internal program logic error.

**Error Message**

`%TN3270S-1-RESOURCE_POOL_NOT_FOUND: Could not find the ResourceCB associated with the Pool [chars]`

**Explanation** The ResourceCB associated with the pool could not be found. This message is usually the consequence of another problem. This is an indication of an internal program logic error.

**Recommended Action** It is important to report this problem to your Cisco technical support representative because it reflects an internal program logic error.

**Error Message**

`%TN3270S-1-RP_PU_CONFLICT: RP & CIP hold conflicting PU name([chars]) or index([dec])`

**Explanation** The RP has requested action (update or delete) on a PU resource from the CIP TN3270 server that is stale or incorrect.

**Recommended Action** Reload the CIP microcode. If the problem recurs, run the following commands before reloading the CIP microcode (! for each CIP in router): **show ext chan /2 tn3270, show controllers cbus wr t**. Report all findings to your Cisco technical support representative.

**Error Message**

`%TN3270S-1-RP_RTGROUP_CONFLICT: RP & CIP hold conflicting Response Time Group name([chars])`

**Explanation** The RP has requested action (update or delete) on a Response Time Group resource from the CIP TN3270 server that is stale or incorrect.

**Recommended Action** Reload the CIP microcode. If the problem recurs, run the following commands before reloading the CIP microcode (! for each CIP in router): **show ext chan /2 tn3270, show controllers cbus wr t**. Report all findings to your Cisco technical support representative.

**Error Message**

%TN3270S-4-SESSION\_NEGOT\_TIME\_EXPIRED: A client session from [chars]:[dec] failed to negotiate TN3270/TN3270E.

**Explanation** A Telnet session that failed to negotiate TN3270/TN3270E within a specified time period has been disconnected. There could be a bug in the client, or it could be a transient network problem.

**Recommended Action** Try to locate the TN3270 client that caused the problem.

**Error Message**

%TN3270S-1-SNA\_BAD\_SEQUENCE: LU-LU session bad sequence number, lu [chars].[dec] expected snf = [dec], current snf = [dec]

**Explanation** An unexpected LU-LU session sequence has been received. The LU was presented to the LU named by the LOCADDR and PU. The error will cause a negative response of sense code X2001 to be sent to the host.

**Recommended Action** Examine the SSCP host VTAM console for the status of the specified LU. Get a trace output for the specified LU and report this problem to your Cisco technical support representative.

**Error Message**

%TN3270S-1-SNA\_BAD\_WSF: LU-LU session [chars].[dec] WSF data is illegal

**Explanation** A WSF 3270DS write with an invalid data length has been received.

**Recommended Action** Examine what application in the host sends this WSF, and report this problem to your Cisco technical representative.

**Error Message**

%TN3270S-1-SNA\_NO\_PU\_RESPONSE: PU [chars] locaddr [dec] does not get a response in 30 seconds

**Explanation** A PU had sent a request to the host but did not receive a response within the 30-second time limit.

**Recommended Action** Check to see if the PU is still in an active or busy state. Verify that the VTAM can talk to the PU. Check the LLC2 connection.

**Error Message**

%TN3270S-4-SO\_SNDBUF\_FAILED: TNSetBindParam:SO\_SNDBUF setsockopt for session failed sendSize [dec] err [dec]

**Explanation** An internal error occurred during the setting of the transmit window size for a TCP session. The session is using the default window size.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, call your Cisco technical support representative, and provide the representative with the gathered information. Also send information about your configuration, output of the **show controller cxbus** command, and any action required to reproduce this problem.

**Error Message**

```
%TN3270S-1-START_FAIL: Failed to start Tn3270-server
```

**Explanation** The TN3270 server failed to start correctly and is now not running. The immediately preceding error messages point to the cause of the failure.

**Recommended Action** Review the previous error messages to discover what caused the start failure, and take action based on those messages.

**Error Message**

```
%TN3270S-6-START_OK: Starting Tn3270-server
```

**Explanation** The TN3270 server subsystem has been brought up.

**Recommended Action** No action is required.

**Error Message**

```
%TN3270S-1-STARTUP_RACE: InitTimerService Failed;Previous timer service still up
```

**Explanation** An attempt to restart the TN3270 server occurred before the previous shutdown could be completed.

**Recommended Action** If this problem is due to quick restart of TN3270 server, try again to start the TN3270 server. Copy the error message exactly as it appears on the console or in the system log, call your Cisco technical support representative, and provide the representative with the gathered information. Also send information about your configuration, output of the **show controller cxbus** command, and any action required to reproduce this problem.

**Error Message**

```
%TN3270S-6-STOPPING: Stopping Tn3270-server
```

**Explanation** The TN3270 server subsystem has been shut down.

**Recommended Action** No action is required.

**Error Message**

```
%TN3270S-2-TELNETINITFAIL: Initialization of TN3270 server Failed
```

**Explanation** Initialization of the Telnet component of the TN3270 server has failed.

**Recommended Action** This error is most probably caused by inadequate memory on the CIP card. If the memory on the CIP card is not the problem, report this message to your Cisco technical support representative.

**Error Message**

%TN3270S-4-TN3270\_CONFIG\_INCOMPATIBLE: IOS sub-codepoint [dec] with length [dec] not understood

**Explanation** The TN3270 server has received a configuration command from the Cisco IOS software that the CIP does not recognize; some functionality may not be implemented.

**Recommended Action** Ensure that the Cisco IOS software version is compatible with the version of software running on the CIP.

**Error Message**

%TN3270S-6-TOOBIG: [dec] byte IP datagram exceeds TN3270 Server receive buffer limit

**Explanation** The router has sent an IP datagram to the TN3270 server IP address that is larger than the maximum size of 4096. The IP datagram has been dropped.

**Recommended Action** No action is required.

**Error Message**

%TN3270S-4-TOO\_MANY\_HOST\_WRITES: Client on PU [dec]:locaddr [dec] ip [chars]:[dec] is being disconnected;Check outbound LU pacing.

**Explanation** The TN3270 client is being disconnected. This could either be a transient network problem or an internal error in the server.

**Recommended Action** Ensure that LU outbound pacing is configured. If that is correct, try to locate the TN3270 client that caused the problem. There could be bug in the client. Also try to get a Telnet trace of the session by reproducing the problem. Report this error to your Cisco technical support representative.

**Error Message**

%TN3270S-7-UNKNOWN\_SNA\_MSG: Unknown message for PU [chars], data: [chars]

**Explanation** An SNA message from the host is invalid.

**Recommended Action** If it only happens once, this could a transient problem caused by a high volume of network activity. Record the message for later reference. If the error persists, ensure that the host is configured correctly.

**Error Message**

%TN3270S-6-UNSUPPORTED\_FUNCTIONALITY: The requested functionality is not currently supported

**Explanation** This functionality is not currently supported.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.



**Error Message**

%TN3270S-6-UNSUPPORTED\_LU\_DELETION\_OPTION: The LU Deletion Option is not supported.

**Explanation** The LU deletion option is not supported by this version of the CIP.

**Recommended Action** Ensure that the Cisco IOS software and CIP versions match.

## CMCC UTIL Messages

The following Channel Interface Processor (CIP) error messages are related to the channel adapter utilities.

**Error Message**

%UTIL-3-LINKLIST: [chars]([hex])

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

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

## CMCC XCPA Messages

The following are channel port adapter error messages.

**Error Message**

%XCPA-3-CKSUM\_OFFSET: Invalid checksum offset: offset = [dec], length = [dec]

**Explanation** The microcode was unable to update the packet checksum. The packet will be dropped.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, call your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%XCPA-2-MBX. : [chars] - [dec]
```

**Explanation** A software program error has occurred on the Channel Port Adapter Mailbox. This could affect console support on the PA, logger messages, and configuration commands.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, call your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%XCPA-3-NOMEMORY: Out of memory trying to [chars].
```

**Explanation** The channel port adapter does not have sufficient memory to allocate the necessary resources.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, call your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%XCPA-2-PMC_TIMEOUT: PMC Timeout: poll_interval = [hex]
```

**Explanation** A timeout occurred while the channel port adapter was trying to access either memory or the channel interface.

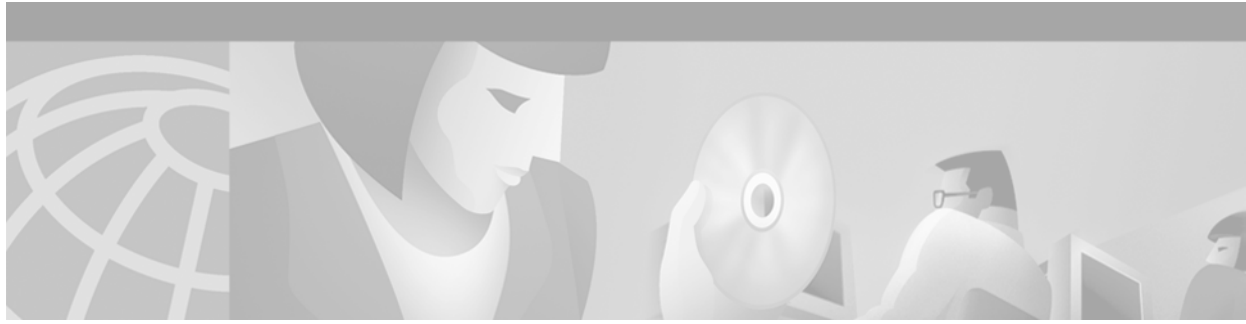
**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, call your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message**

```
%XCPA-3-SWVER_MISMATCH: Incompatible switching version, unable to find version [dec].
```

**Explanation** The Cisco IOS and CMCC microcode versions are incompatible.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, call your Cisco technical support representative, and provide the representative with the gathered information.



## System Failure Messages

This section discusses 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, from either a hardware or a software failure. To access these messages, use the bootstrap program.

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

In the following example, a timeout error message appears, and 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 8](#) describes the fields in this sample stack trace.

**Table 8** Stack Trace Fields

| Code                  | Facility                                                                                     |
|-----------------------|----------------------------------------------------------------------------------------------|
| Current PC: 0x313DC22 | Address at which the failure occurred. This address is also called the program counter (PC). |
| FP: 0xE6620           | Stack frame pointer.                                                                         |

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 virtual (software) configuration register and the boot bits (lowest four bits) set to a value greater than zero, 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 can then 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.

## System Failure Messages

### Error Message

```
Bus Error control register: [hex]\nnon-local memory transaction timeout\nBus 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 you tried to boot up a system image over the network or from reprogrammed Flash memory, a probable reason could be the use of a wrong or incompatible system image. Look in the appropriate documentation to find out which system image to use. If you still need assistance, contact your technical support representative with the following details:

- Name of the system image file used for booting (as obtained from the technical support representative)
- Product name and configuration
- **show version** output from any bootable ROM-based image available on the system (a bootstrap image, for example)
- If the error occurred while trying to boot up a built-in ROM-based image, contact your technical support representative with the following details:
  - Product name and configuration
  - Any hardware or 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]/nram byte ([value]) parity error\nBus 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]\nsystem overtemp\nBus 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** See the recommended action for the first “Bus Error control register” message in this section.

### Error Message

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

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

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

### Error Message

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

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

**Recommended Action** Reboot the system and observe whether the problem recurs. Also ensure that the power line has appropriate protection equipment. If the problem is a one-time occurrence, the cause could be a power line disturbance. If this message recurs, call your technical support representative for assistance.

### Error Message

Shared Memory Parity Error\nshared memory control register = [hex]\nerror caused by slot [dec] access in byte(s) [dec]

Shared Memory Parity Error\nshared memory control register = [hex]\nerror 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 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** See 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** See 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.

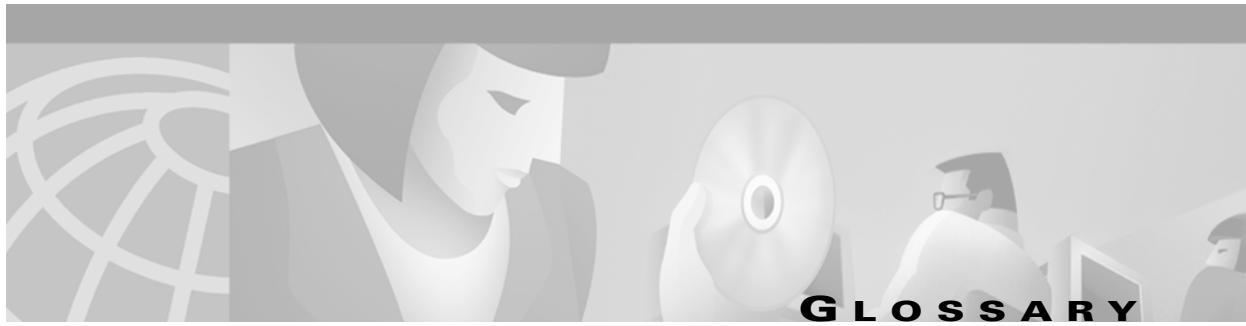
**Recommended Action** Refer to the recommended action for the first “Bus Error control register” message in this section.



## **Glossary of Acronyms**







The following glossary of acronyms expands acronyms and initialisms that are used in *Cisco IOS System Error Messages, Release 12.2*.

---

## A

|              |                                               |
|--------------|-----------------------------------------------|
| <b>AAA</b>   | authentication, authorization, and accounting |
| <b>AAL5</b>  | ATM adaptation layer 5                        |
| <b>ABM</b>   | asynchronous balanced mode                    |
| <b>ABR</b>   | Area Border Router                            |
| <b>AC</b>    | alternating current                           |
| <b>ACIP</b>  | ATM Cable Interface Processor                 |
| <b>ACL</b>   | Access Control List                           |
| <b>ACO</b>   | alarm cutoff                                  |
| <b>ACTLU</b> | activate logical unit                         |
| <b>ACTPU</b> | activate physical unit                        |
| <b>ADSL</b>  | asymmetric digital subscriber line            |
| <b>AH</b>    | Authentication Header                         |
| <b>AIP</b>   | ATM Interface Processor                       |
| <b>ALC</b>   | ATM Line Card                                 |
| <b>ALPS</b>  | Airline Product Set                           |
| <b>AMD</b>   | Advanced Micro Devices                        |
| <b>ANR</b>   | Automatic Network Routing                     |
| <b>ANS1</b>  | <i>Undefined</i>                              |
| <b>AP</b>    | authentication proxy                          |
| <b>API</b>   | application programming interface             |
| <b>APING</b> | <i>Undefined</i>                              |

|               |                                            |
|---------------|--------------------------------------------|
| <b>APN</b>    | access point name                          |
| <b>APPC</b>   | Advanced Program-to-Program Communications |
| <b>APPN</b>   | Advanced Peer-to-Peer Networking           |
| <b>APS</b>    | automatic protection switching             |
| <b>ARAP</b>   | AppleTalk Remote Access Protocol           |
| <b>ARB</b>    | Adaptive Rate-Based                        |
| <b>ARP</b>    | Address Resolution Protocol                |
| <b>ARQ</b>    | automatic repeat request                   |
| <b>AS</b>     | autonomous system                          |
| <b>ASCU</b>   | agent-set control unit                     |
| <b>ASIC</b>   | application-specific integrated circuit    |
| <b>ASP</b>    | ATM switch processor                       |
| <b>ATF</b>    | area to free                               |
| <b>ATM</b>    | Asynchronous Transfer Mode                 |
| <b>AURP</b>   | AppleTalk Update-Based Routing Protocol    |
| <b>AutoRP</b> | Auto-Rendezvous Point                      |
| <b>AVL</b>    | approved vendor list                       |

---

**B**

|             |                               |
|-------------|-------------------------------|
| <b>BAP</b>  | Bandwidth Allocation Protocol |
| <b>BB</b>   | <i>Undefined</i>              |
| <b>BBI</b>  | <i>Undefined</i>              |
| <b>BERT</b> | bit error rate tester         |
| <b>BGP</b>  | Border Gateway Protocol       |
| <b>BIC</b>  | backplane interface card      |
| <b>BIDI</b> | bidirectional bus             |
| <b>BIND</b> | Berkeley Internet Name Domain |
| <b>BIS</b>  | <i>Undefined</i>              |

|              |                                   |
|--------------|-----------------------------------|
| <b>BLLI</b>  | Broadband Low Layer Information   |
| <b>BMA</b>   | Buffer Management ASIC            |
| <b>BOOTP</b> | Bootstrap Protocol                |
| <b>BPDU</b>  | bridge protocol data unit         |
| <b>BPI</b>   | baseline privacy interface        |
| <b>BRI</b>   | Basic Rate Interface              |
| <b>BRF</b>   | Bridge Relay Function             |
| <b>BSC</b>   | Binary Synchronous Communications |
| <b>BSS</b>   | Business Support System           |
| <b>BSTUN</b> | Block Serial Tunnel               |
| <b>BTU</b>   | <i>Undefined</i>                  |
| <b>BUS</b>   | broadcast-and-unknown server      |

---

**C**

|              |                                                                |
|--------------|----------------------------------------------------------------|
| <b>CA</b>    | certification authority                                        |
| <b>CAIM</b>  | Compression Advanced Interface Module                          |
| <b>CAM</b>   | content-addressable memory                                     |
| <b>CAS</b>   | channel-associated signaling                                   |
| <b>CASA</b>  | Cisco Appliance and Services Architecture                      |
| <b>CBAC</b>  | Context-Based Access Control                                   |
| <b>CBI</b>   | <i>Undefined</i>                                               |
| <b>CBUS</b>  | ciscoBus                                                       |
| <b>CCAPI</b> | call control API                                               |
| <b>CCB</b>   | call control block                                             |
| <b>CCO</b>   | Cisco Connection Online (obsolete term, replaced by Cisco.com) |
| <b>CCW</b>   | channel command word                                           |
| <b>CDI</b>   | <i>Undefined</i>                                               |
| <b>CDM</b>   | cable data modem                                               |

|              |                                             |
|--------------|---------------------------------------------|
| <b>CDP</b>   | Cisco Discovery Protocol                    |
| <b>CE</b>    | certificate enrollment                      |
| <b>CEB</b>   | <i>Undefined</i>                            |
| <b>CEBI</b>  | <i>Undefined</i>                            |
| <b>CEF</b>   | Cisco Express Forwarding                    |
| <b>CES</b>   | circuit emulation service                   |
| <b>CET</b>   | Cisco Encryption Technology                 |
| <b>CGMP</b>  | Cisco Group Management Protocol             |
| <b>CGX</b>   | CryptoGraphics eXtensions                   |
| <b>CHAP</b>  | Challenge Handshake Authentication Protocol |
| <b>CI</b>    | chassis interface                           |
| <b>CICS</b>  | Customer Information Control System         |
| <b>CIP</b>   | Channel Interface Processor                 |
| <b>CIP2</b>  | enhanced Channel Interface Processor        |
| <b>CIR</b>   | committed information rate                  |
| <b>CLAW</b>  | Common Link Access for Workstations         |
| <b>CLI</b>   | command-line interface                      |
| <b>CLNS</b>  | Connectionless Network Service              |
| <b>CLS</b>   | Cisco link services                         |
| <b>CLSI</b>  | Cisco link services interface               |
| <b>CMCC</b>  | Cisco Mainframe Channel Connection          |
| <b>CMNS</b>  | Connection Mode Network Service             |
| <b>CMPC</b>  | Cisco Multipath Channel                     |
| <b>CMTS</b>  | cable modem termination system              |
| <b>CNR</b>   | Cisco Network Registrar                     |
| <b>CNOS</b>  | change number of sessions                   |
| <b>CNS</b>   | Cisco Networking Services                   |
| <b>codec</b> | coder-decoder                               |
| <b>CoS</b>   | class of service                            |

|              |                                                 |
|--------------|-------------------------------------------------|
| <b>COT</b>   | continuity testing                              |
| <b>CP</b>    | control point                                   |
| <b>CPA</b>   | Channel Port Adapter                            |
| <b>CPI</b>   | common part indicator                           |
| <b>CPI-C</b> | common programming interface for communications |
| <b>CRC</b>   | cyclic redundancy check                         |
| <b>CRF</b>   | Concentrator Relay Function                     |
| <b>CRL</b>   | certificate revocation list                     |
| <b>CRV</b>   | call reference value                            |
| <b>CSA</b>   | compression service adapter                     |
| <b>CSAR</b>  | Cisco Cell Segmentation and Reassembly          |
| <b>CSC</b>   | clock switch card                               |
| <b>CSI</b>   | called subscriber identification                |
| <b>CSM</b>   | call switching mode                             |
| <b>CSM</b>   | call switching module                           |
| <b>CSNA</b>  | Cisco SNA                                       |
| <b>CSU</b>   | channel service unit                            |
| <b>CTRC</b>  | Cisco Transaction Connection                    |
| <b>CTS</b>   | Clear To Send                                   |
| <b>CV</b>    | <i>Undefined</i>                                |
| <b>CWAN</b>  | Constellation WAN                               |

---

**D**

|            |                               |
|------------|-------------------------------|
| <b>DC</b>  | direct-connect                |
| <b>DC</b>  | direct current                |
| <b>DCD</b> | data carrier detect           |
| <b>DCE</b> | data communications equipment |
| <b>DDR</b> | dial-on-demand routing        |

|               |                                                  |
|---------------|--------------------------------------------------|
| <b>DDSM</b>   | Digital Data Services Manager                    |
| <b>DFC</b>    | dial feature card                                |
| <b>DFP</b>    | Dynamic Feedback Protocol                        |
| <b>DHCP</b>   | Dynamic Host Configuration Protocol              |
| <b>DLC</b>    | data-link connection                             |
| <b>DLC</b>    | data-link control                                |
| <b>DLCI</b>   | data-link connection identifier                  |
| <b>DLR</b>    | designated local retransmitter                   |
| <b>DLSw</b>   | data-link switching                              |
| <b>DLU</b>    | dependent logical unit                           |
| <b>DLU</b>    | destination logical unit                         |
| <b>DLU</b>    | dynamic logical unit                             |
| <b>DLUR</b>   | dependent logical unit requester                 |
| <b>DLUS</b>   | dependent logical unit server                    |
| <b>DM</b>     | disconnect mode                                  |
| <b>DMA</b>    | direct memory access                             |
| <b>DMAC</b>   | destination MAC                                  |
| <b>DMLP</b>   | Distributed Multilink Point-to-Point Protocol    |
| <b>DNIS</b>   | dialed number identification service             |
| <b>DNS</b>    | Domain Name Server                               |
| <b>DNS</b>    | Domain Name Service                              |
| <b>DNS</b>    | Domain Name System                               |
| <b>DOCSIS</b> | Data-over-Cable Service Interface Specifications |
| <b>DOI</b>    | domain of interpretation                         |
| <b>DPRAM</b>  | dual-port RAM                                    |
| <b>DR</b>     | dynamic replenishment                            |
| <b>DRAM</b>   | dynamic RAM                                      |
| <b>DRDA</b>   | Distributed Relational Database Architecture     |
| <b>DRiP</b>   | Duplicate Ring Protocol                          |

|              |                                            |
|--------------|--------------------------------------------|
| <b>DRP</b>   | Director Response Protocol                 |
| <b>DSC</b>   | dial shelf control                         |
| <b>DSC</b>   | dial shelf controller                      |
| <b>DSI</b>   | dial shelf interconnect                    |
| <b>DSI</b>   | dial shelf interface                       |
| <b>DSIP</b>  | Dial Shelf Interconnect Protocol           |
| <b>DSL</b>   | digital subscriber line                    |
| <b>DSP</b>   | digital signal processor                   |
| <b>DSP</b>   | Domain Specific Part                       |
| <b>DSPM</b>  | digital signal processor module            |
| <b>DSPRM</b> | Digital Signal Processor Resource Manager  |
| <b>DSPU</b>  | downstream physical unit                   |
| <b>DSR</b>   | data set ready                             |
| <b>DSU</b>   | data service unit                          |
| <b>DSU</b>   | digital service unit                       |
| <b>DTE</b>   | data terminal equipment                    |
| <b>DTP</b>   | Dynamic Trunking Protocol                  |
| <b>DTR</b>   | data terminal ready                        |
| <b>DVMRP</b> | Distance Vector Multicast Routing Protocol |

---

**E**

|              |                                     |
|--------------|-------------------------------------|
| <b>EC</b>    | EtherChannel                        |
| <b>ECA</b>   | ESCON Channel Adapter               |
| <b>ECC</b>   | error-correcting code               |
| <b>ECC</b>   | Error-Check Code                    |
| <b>ECC</b>   | error checking and correction       |
| <b>ECPA</b>  | Escon Channel Port Adapter          |
| <b>ECPA4</b> | Enhanced Escon Channel Port Adapter |

|               |                                            |
|---------------|--------------------------------------------|
| <b>EEPROM</b> | erasable programmable read-only memory     |
| <b>EGP</b>    | exterior gateway protocol                  |
| <b>EHSA</b>   | enhanced high system availability          |
| <b>EID</b>    | endpoint identifier                        |
| <b>EIGRP</b>  | Enhanced Interior Gateway Routing Protocol |
| <b>ELAN</b>   | emulated LAN                               |
| <b>ENVM</b>   | Constellation WAN Environmental Monitor    |
| <b>EOF</b>    | end of frame                               |
| <b>EOIR</b>   | enhanced online insertion and removal      |
| <b>ESCON</b>  | Enterprise System Connection               |
| <b>ESP</b>    | Extended Services Processor                |

---

**F**

|               |                                  |
|---------------|----------------------------------|
| <b>FAQ</b>    | frequently asked questions       |
| <b>FB</b>     | feature board                    |
| <b>FCIT</b>   | <i>Undefined</i>                 |
| <b>FC-PFQ</b> | feature card per-flow queueing   |
| <b>FDDI</b>   | Fiber Distributed Data Interface |
| <b>FDL</b>    | Facility Data Link               |
| <b>FDM</b>    | frequency-division multiplexing  |
| <b>FE</b>     | Fast Ethernet                    |
| <b>FEC</b>    | Fast EtherChannel                |
| <b>FI</b>     | format indicator                 |
| <b>FIA</b>    | Fabric Interface ASIC            |
| <b>FIB</b>    | forwarding information base      |
| <b>FIFO</b>   | first-in, first-out              |
| <b>FIR</b>    | Finite Impulse Response          |
| <b>FM</b>     | <i>Undefined</i>                 |



|               |                                                  |
|---------------|--------------------------------------------------|
| <b>FMSP</b>   | Fax MSP                                          |
| <b>FPGA</b>   | field-programmable gate array                    |
| <b>FQDN</b>   | fully qualified domain name                      |
| <b>FQPCID</b> | fully qualified procedure correlation identifier |
| <b>FRMR</b>   | Frame Reject                                     |
| <b>FRU</b>    | field-replaceable unit                           |
| <b>FSIP</b>   | Fast Serial Interface Processor                  |
| <b>FSM</b>    | finite state machine                             |
| <b>FTP</b>    | File Transfer Protocol                           |

---

**G**

|             |                                      |
|-------------|--------------------------------------|
| <b>GBIC</b> | Gigabit Interface Converter          |
| <b>GC</b>   | global configuration                 |
| <b>GDS</b>  | general data stream                  |
| <b>GE</b>   | Gigabit Ethernet                     |
| <b>GEIP</b> | Gigabit Ethernet Interface Processor |
| <b>GGSN</b> | gateway GPRS support node            |
| <b>GLC</b>  | Gigabit line card                    |
| <b>GPRS</b> | general packet radio service         |
| <b>GRP</b>  | gigabit route processor              |
| <b>GSN</b>  | GPRS support node                    |
| <b>GSR</b>  | Internet router                      |
| <b>GTF</b>  | Generalized Trace Facility           |
| <b>GTP</b>  | GPRS tunneling protocol              |

---

**H**

|             |                              |
|-------------|------------------------------|
| <b>HDLC</b> | High-Level Data Link Control |
| <b>HDV</b>  | High Density Voice           |

|              |                                     |
|--------------|-------------------------------------|
| <b>HDX</b>   | half-duplex                         |
| <b>HGW</b>   | home gateway                        |
| <b>HPR</b>   | High-Performance Routing            |
| <b>HSA</b>   | high system availability            |
| <b>HSRP</b>  | Hot Standby Router Protocol         |
| <b>HWIDB</b> | hardware interface descriptor block |

---

**I**

|               |                                                   |
|---------------|---------------------------------------------------|
| <b>IBGP</b>   | internal BGP                                      |
| <b>IBOC</b>   | in-band bit-oriented code                         |
| <b>ICC</b>    | Interface Controller Card                         |
| <b>ICMP</b>   | Internet Control Message Protocol                 |
| <b>ICPIF</b>  | Calculated Planning Impairment Factor             |
| <b>ICS</b>    | Integrated Communication System                   |
| <b>IDAP</b>   | <i>Undefined</i>                                  |
| <b>IDB</b>    | interface descriptor block                        |
| <b>IDPROM</b> | Identification PROM                               |
| <b>IDS</b>    | Internal Data Services                            |
| <b>IDT</b>    | Integrated Digital Terminal                       |
| <b>IDU</b>    | indoor unit                                       |
| <b>IEEE</b>   | Institute of Electrical and Electronics Engineers |
| <b>IETF</b>   | Internet Engineering Task Force                   |
| <b>IF</b>     | intermediate frequency                            |
| <b>IGMP</b>   | Internet Group Management Protocol                |
| <b>IGRP</b>   | Interior Gateway Routing Protocol                 |
| <b>IKE</b>    | Internet Key Exchange                             |
| <b>ILMI</b>   | Integrated Local Management Interface             |
| <b>IMA</b>    | inverse multiplexing over ATM                     |

|               |                                                           |
|---------------|-----------------------------------------------------------|
| <b>IP</b>     | Internet Protocol                                         |
| <b>IPC</b>    | interprocess communication                                |
| <b>IPDC</b>   | Internet Protocol device control                          |
| <b>IPDLC</b>  | IP data link connection                                   |
| <b>IPG</b>    | Inter-Packet Gap                                          |
| <b>IPM</b>    | Cisco Internetwork Performance Monitor                    |
| <b>IPPCP</b>  | IP Payload Compression Protocol                           |
| <b>IPSec</b>  | IP Security                                               |
| <b>IPv6</b>   | IP version 6                                              |
| <b>IPX</b>    | Internetwork Packet Exchange                              |
| <b>ISA</b>    | Integrated Services Adapter                               |
| <b>ISAKMP</b> | Internet Security Association and Key Management Protocol |
| <b>ISDN</b>   | Integrated Services Digital Network                       |
| <b>IS-IS</b>  | Intermediate System-to-Intermediate System                |
| <b>ISL</b>    | Inter-Switch Link                                         |
| <b>ISR</b>    | intermediate session routing                              |
| <b>IVR</b>    | interactive voice response                                |

---

**L**

|              |                                        |
|--------------|----------------------------------------|
| <b>LAC</b>   | L2TP access concentrator               |
| <b>LANCE</b> | Local Area Network Controller Ethernet |
| <b>LANE</b>  | LAN Emulation                          |
| <b>LAPB</b>  | Link Access Procedure, Balanced        |
| <b>LAT</b>   | local-area transport                   |
| <b>LC</b>    | line card                              |
| <b>LCB</b>   | Line Control Block                     |
| <b>LCD</b>   | liquid crystal display                 |
| <b>LCI</b>   | local channel identifier               |

|              |                                        |
|--------------|----------------------------------------|
| <b>LCN</b>   | logical channel number                 |
| <b>LDLC</b>  | LocalDirector link control             |
| <b>LDN</b>   | local directory number                 |
| <b>LDP</b>   | label distribution protocol            |
| <b>LEC</b>   | LANE Client                            |
| <b>LECS</b>  | LANE Configuration Server              |
| <b>LEN</b>   | low-entry networking                   |
| <b>LES</b>   | LANE Server                            |
| <b>LFSID</b> | local-form session identifier          |
| <b>LIR</b>   | link incident report                   |
| <b>LLC</b>   | logical link control                   |
| <b>LLC2</b>  | Logical Link Control, type 2           |
| <b>LMI</b>   | Local Management Interface             |
| <b>LNМ</b>   | LAN Network Manager                    |
| <b>LNS</b>   | L2TP network server                    |
| <b>LPD</b>   | line printer daemon                    |
| <b>LS</b>    | <i>Undefined</i>                       |
| <b>LSA</b>   | link-state advertisement               |
| <b>LSIPC</b> | LightStream interprocess communication |
| <b>LSP</b>   | Label Switch Path                      |
| <b>LSP</b>   | link-state packet                      |
| <b>LU</b>    | logical unit                           |
| <b>LU6.2</b> | logical unit type 6.2                  |

---

## M

|             |                                     |
|-------------|-------------------------------------|
| <b>MAC</b>  | Media Access Control                |
| <b>MARS</b> | Multicast Address Resolution Server |
| <b>MAU</b>  | media attachment unit               |

|                |                                                |
|----------------|------------------------------------------------|
| <b>MBRI</b>    | Multi-BRI                                      |
| <b>MBRI</b>    | Multipoint Basic Rate Interface                |
| <b>MBus</b>    | maintenance bus                                |
| <b>MCNS</b>    | Multimedia Cable Network System Partners, Ltd. |
| <b>MCOM</b>    | Microcom carrier card                          |
| <b>MD5</b>     | message digest algorithm 5                     |
| <b>MDS</b>     | multicast distributed switching                |
| <b>MEMD</b>    | memory device                                  |
| <b>MGCP</b>    | Media Gateway Control Protocol                 |
| <b>MIB</b>     | Management Information Base                    |
| <b>MIB/SMT</b> | Management Information Base/Station Management |
| <b>MIC</b>     | media interface connector                      |
| <b>MICA</b>    | Modem ISDN channel aggregation                 |
| <b>MID</b>     | Multiplex ID                                   |
| <b>midb</b>    | multicast interface data block                 |
| <b>MII</b>     | media-independent interface                    |
| <b>MLS</b>     | multilayer switching                           |
| <b>MLTG</b>    | multilink trunk group                          |
| <b>MNCNS</b>   | Multimedia Cable Network System Partners, Ltd. |
| <b>MNP4</b>    | Microcom Networking Protocol, level 4          |
| <b>MPC</b>     | MultiPath Channel                              |
| <b>MPC</b>     | Multiprotocol-over-ATM client                  |
| <b>MPLS</b>    | Multiprotocol Label Switching                  |
| <b>MPOA</b>    | Multiprotocol over ATM                         |
| <b>MPS</b>     | Multiprotocol-over-ATM server                  |
| <b>MSDP</b>    | Multicast Source Discovery Protocol            |
| <b>MSFC</b>    | Multilayer Switch Feature Card                 |
| <b>MPT</b>     | Ministry of Posts and Telecommunications       |
| <b>MS</b>      | Management Services                            |

**MTU** maximum transmission unit

**Mx** *Undefined*

---

**N**

**NAK** negative acknowledgment

**NAS** network access server

**NAT** Network Address Translation

**NBAR** network-based application recognition

**NBP** Name Binding Protocol

**NCE** network connection endpoint

**NCP** Network Control Program

**NCP** Network Control Protocol

**NHDR** Network Layer Header

**NHRP** Next Hop Resolution Protocol

**NHS** Next Hop Server

**NIM** network interface module

**NIP** Nitro Interconnect Protocol

**NLP** network-layer packet

**NLSP** NetWare Link Services Protocol

**NM** network module

**NMI** nonmaskable interrupt

**NMP** Network Management Processor

**NMS** network management system

**NMVT** network management vector transport

**NNI** Network-to-Network Interface

**NNS** network node server

**NPE** network processing engine

**NRM** normal response mode

|              |                              |
|--------------|------------------------------|
| <b>NRP</b>   | Network Routing Processor    |
| <b>NRP</b>   | node route processor         |
| <b>NSAP</b>  | network service access point |
| <b>NSE</b>   | network services engine      |
| <b>NSP</b>   | Network Switch Processor     |
| <b>NSP</b>   | node switch processor        |
| <b>NVRAM</b> | nonvolatile RAM              |

---

**O**

|             |                                            |
|-------------|--------------------------------------------|
| <b>OAM</b>  | Operation, Administration, and Maintenance |
| <b>ODU</b>  | outdoor unit                               |
| <b>OIR</b>  | online insertion and removal               |
| <b>OOBP</b> | out-of-band port                           |
| <b>OOS</b>  | out of service                             |
| <b>OSPF</b> | Open Shortest Path First                   |
| <b>OSS</b>  | <i>Undefined</i>                           |

---

**P**

|              |                                   |
|--------------|-----------------------------------|
| <b>PA</b>    | port adapter                      |
| <b>PAD</b>   | packet assembler/disassembler     |
| <b>PAgP</b>  | Port Aggregation Protocol         |
| <b>PAM</b>   | port adapter module card          |
| <b>PAM</b>   | pulse amplitude modulation        |
| <b>PAP</b>   | Password Authentication Protocol  |
| <b>PASCB</b> | port adapter system control block |
| <b>PBP</b>   | packet-by-packet                  |
| <b>PC</b>    | program counter                   |
| <b>PCA</b>   | parallel channel adapter          |

|               |                                               |
|---------------|-----------------------------------------------|
| <b>PCI</b>    | protocol control information                  |
| <b>PCM</b>    | pulse code modulation                         |
| <b>PCPA</b>   | Parallel Channel Port Adapter                 |
| <b>PCR</b>    | peak cell rate                                |
| <b>PDP</b>    | policy decision point                         |
| <b>PDU</b>    | protocol data unit                            |
| <b>PGM</b>    | Pragmatic General Multicast                   |
| <b>PIC</b>    | Peripheral Interface Controller               |
| <b>PIC</b>    | point in call                                 |
| <b>PIE</b>    | protocol information element                  |
| <b>PIF</b>    | Packet Input FIFO                             |
| <b>PIM</b>    | Protocol Independent Multicast                |
| <b>PIMv2</b>  | Protocol Independent Multicast version 2      |
| <b>PIU</b>    | PCM Interface Unit                            |
| <b>PKI</b>    | public key infrastructure                     |
| <b>PLD</b>    | programmable logic device                     |
| <b>PLU</b>    | primary logical unit                          |
| <b>PM</b>     | <i>Undefined, refers to SPE state machine</i> |
| <b>PNNI</b>   | Private Network-Network Interface             |
| <b>PoS</b>    | Packet over SONET                             |
| <b>PoS</b>    | Packet over SONET/SDH                         |
| <b>POST</b>   | power-on self test                            |
| <b>POTS</b>   | plain old telephone service                   |
| <b>PPP</b>    | Point-to-Point Protocol                       |
| <b>PRI</b>    | Primary Rate Interface                        |
| <b>PROM</b>   | programmable read-only memory                 |
| <b>PU</b>     | physical unit                                 |
| <b>PU 2.0</b> | Physical Unit 2.0                             |
| <b>PU 2.1</b> | Physical Unit 2.1                             |



|             |                              |
|-------------|------------------------------|
| <b>PVC</b>  | permanent virtual circuit    |
| <b>PVC</b>  | permanent virtual connection |
| <b>PVID</b> | Port VLAN ID                 |
| <b>PVP</b>  | permanent virtual path       |
| <b>PXF</b>  | Parallel eXpress Forwarding  |
| <b>PXM</b>  | Processor Switching Module   |

---

**Q**

|             |                                |
|-------------|--------------------------------|
| <b>QA</b>   | queue and accumulator          |
| <b>QEM</b>  | <i>Undefined</i>               |
| <b>QLLC</b> | Qualified Logical Link Control |
| <b>QoS</b>  | quality of service             |

---

**R**

|               |                                            |
|---------------|--------------------------------------------|
| <b>RA</b>     | registration authority                     |
| <b>RAC</b>    | Resource Availability Confirm              |
| <b>RADIUS</b> | Remote Authentication Dial-In User Service |
| <b>RARP</b>   | Reverse Address Resolution Protocol        |
| <b>RAS</b>    | Registration, Admission, and Status        |
| <b>RAS</b>    | remote access server                       |
| <b>RBS</b>    | Robbed-Bit Signaling                       |
| <b>RCP</b>    | remote copy protocol                       |
| <b>RDB</b>    | relational database                        |
| <b>REXEC</b>  | remote execution                           |
| <b>RF</b>     | radio frequency                            |
| <b>RIP</b>    | Routing Information Protocol               |
| <b>RISC</b>   | reduced instruction set computer           |
| <b>RJE</b>    | remote job entry                           |

|               |                                |
|---------------|--------------------------------|
| <b>RLM</b>    | Redundant Link Manager         |
| <b>RNR</b>    | receive not ready              |
| <b>ROM</b>    | read-only memory               |
| <b>RP</b>     | Route Processor                |
| <b>RPA</b>    | Resource Pool Allocation       |
| <b>RPC</b>    | Remote Procedure Call          |
| <b>RPF</b>    | Reverse Path Forwarding        |
| <b>RPM</b>    | Route Processor Module         |
| <b>RPM</b>    | Resource Pool Management       |
| <b>RPS</b>    | Ring Parameter Server          |
| <b>RR</b>     | receive ready                  |
| <b>RS</b>     | router shelf                   |
| <b>RS-232</b> | EIA/TIA-232                    |
| <b>RSA</b>    | Rivest, Shamir, and Adelman    |
| <b>RSC</b>    | route switch controller        |
| <b>RSCV</b>   | Route Selection Control Vector |
| <b>rsh</b>    | remote shell                   |
| <b>RSM</b>    | Route Switch Module            |
| <b>RSP</b>    | Route Switch Processor         |
| <b>RSRB</b>   | remote source-route bridging   |
| <b>RSVP</b>   | Resource Reservation Protocol  |
| <b>RTM</b>    | Real Time Monitor              |
| <b>RTP</b>    | Rapid Transport Protocol       |
| <b>RTP</b>    | Real-Time Transport Protocol   |
| <b>RTR</b>    | response time reporter         |
| <b>RTS</b>    | Request To Send                |
| <b>RTT</b>    | round-trip time                |
| <b>RTTMON</b> | Round Trip Time Monitor        |

|              |                                         |
|--------------|-----------------------------------------|
| <b>RU</b>    | request/response unit                   |
| <b>Rx</b>    | Receive                                 |
| <hr/>        |                                         |
| <b>S</b>     |                                         |
| <b>SA</b>    | security association                    |
| <b>SA</b>    | Source-Active                           |
| <b>SADB</b>  | security association database           |
| <b>SAP</b>   | service access point                    |
| <b>SAR</b>   | segmentation and reassembly             |
| <b>SC</b>    | <i>Undefined</i>                        |
| <b>SCB</b>   | storage control blocks                  |
| <b>SCB</b>   | system control board                    |
| <b>SCC</b>   | Signaling Connection Control            |
| <b>SCCP</b>  | Signaling Connection Control Part       |
| <b>SCP</b>   | Service Control Point                   |
| <b>SCP</b>   | System Control Protocol                 |
| <b>SDLC</b>  | Synchronous Data Link Control           |
| <b>SDLLC</b> | Synchronous Data Logical Link Control   |
| <b>SDP</b>   | Shelf Discovery Protocol                |
| <b>SDRAM</b> | synchronous DRAM                        |
| <b>SDT</b>   | Start Data Transfer                     |
| <b>SFC</b>   | switch fabric card                      |
| <b>SGBP</b>  | Stack Group Bidding Protocol            |
| <b>SGCP</b>  | Simple Gateway Control Protocol         |
| <b>SGSN</b>  | Serving GPRS Support Node               |
| <b>SID</b>   | Service ID                              |
| <b>SIMM</b>  | single in-line memory module            |
| <b>SLARP</b> | Serial Line Address Resolution Protocol |

|              |                                               |
|--------------|-----------------------------------------------|
| <b>SLB</b>   | Server Load Balancing                         |
| <b>SLC</b>   | signaling link code                           |
| <b>SLCI</b>  | Signaling Link Code Interface                 |
| <b>SLIP</b>  | Serial Line Internet Protocol                 |
| <b>SLU</b>   | secondary logical unit                        |
| <b>SM</b>    | state machine                                 |
| <b>SMDS</b>  | Switched Multimegabit Data Service            |
| <b>SMRP</b>  | Simple Multicast Routing Protocol             |
| <b>SMTP</b>  | Simple Mail Transfer Protocol                 |
| <b>SNA</b>   | Systems Network Architecture                  |
| <b>SNASw</b> | SNA Switch                                    |
| <b>SNMP</b>  | Simple Network Management Protocol            |
| <b>SNR</b>   | signal-to-noise ratio                         |
| <b>SNRM</b>  | Set Normal Response                           |
| <b>SOF</b>   | start of frame                                |
| <b>SOP</b>   | Second-Generation Packet-over-SONET           |
| <b>SP</b>    | Switch Processor                              |
| <b>SPAN</b>  | Switched Port Analyzer                        |
| <b>SPE</b>   | service processing element                    |
| <b>SPI</b>   | security parameter index                      |
| <b>SPID</b>  | service profile identifier                    |
| <b>SPM</b>   | source path message                           |
| <b>SPMM</b>  | SIMM DSP module                               |
| <b>SRA</b>   | source routing accelerator                    |
| <b>SRAM</b>  | Static RAM                                    |
| <b>SRCP</b>  | Simple Resource Coordination Protocol         |
| <b>SRDB</b>  | source route relational database              |
| <b>SSCOP</b> | Service-Specific Connection-Oriented Protocol |
| <b>SSCP</b>  | system services control points                |

|               |                                         |
|---------------|-----------------------------------------|
| <b>SSE</b>    | silicon switching engine                |
| <b>SSH</b>    | Secure Shell                            |
| <b>SSM</b>    | Source Specific Multicast               |
| <b>SSP</b>    | Silicon Switch Processor                |
| <b>SSRP</b>   | Simple Server Redundancy Protocol       |
| <b>SSTP</b>   | Shared Spanning-Tree Protocol           |
| <b>STUN</b>   | serial tunnel                           |
| <b>SU</b>     | service unit                            |
| <b>SU</b>     | signaling unit                          |
| <b>SVC</b>    | switched virtual circuit                |
| <b>SVI</b>    | switched virtual interface              |
| <b>SW56</b>   | switched 56K                            |
| <b>SWIDB</b>  | software for Interface Descriptor Block |
| <b>SYSMGT</b> | system management                       |

---

**T**

|               |                                                  |
|---------------|--------------------------------------------------|
| <b>TAC</b>    | Cisco Technical Assistance Center                |
| <b>TACACS</b> | Terminal Access Controller Access Control System |
| <b>TCAM</b>   | Ternary Content Addressable Memory               |
| <b>TCB</b>    | Transmission Control Block                       |
| <b>TCL</b>    | Toolkit Command Language                         |
| <b>TCP</b>    | Transmission Control Protocol                    |
| <b>TDM</b>    | time-division multiplexing                       |
| <b>TDP</b>    | Tag Distribution Protocol                        |
| <b>TDP</b>    | tag distribution protocol                        |
| <b>TDR</b>    | time domain reflectometer                        |
| <b>TE</b>     | tunnel equipment                                 |
| <b>TED</b>    | Tunnel Endpoint Discovery                        |

|               |                                         |
|---------------|-----------------------------------------|
| <b>TEI</b>    | terminal endpoint identifier            |
| <b>TFIB</b>   | Tag Forwarding Information Base         |
| <b>TFTP</b>   | Trivial File Transfer Protocol          |
| <b>TG</b>     | transmission group                      |
| <b>TIB</b>    | Tag Information Base                    |
| <b>TID</b>    | Terminal Identifier                     |
| <b>TIFF</b>   | tagged image file format                |
| <b>TLV</b>    | type, length, value                     |
| <b>TMQ</b>    | terminal port queueing                  |
| <b>TP</b>     | Transport Protocol                      |
| <b>TR</b>     | Token Ring                              |
| <b>TRANGE</b> | time-range                              |
| <b>TSC</b>    | Tag Switch Controller                   |
| <b>TSI</b>    | transmitting subscriber information     |
| <b>TSP</b>    | tag-switched path                       |
| <b>TTL</b>    | time to live                            |
| <b>TVC</b>    | tag switched controlled virtual circuit |
| <b>TVC</b>    | tag virtual circuits                    |
| <b>Tx</b>     | transmit                                |

---

**U**

|             |                                    |
|-------------|------------------------------------|
| <b>UA</b>   | unnumbered acknowledgement         |
| <b>UCB</b>  | University of California, Berkeley |
| <b>UDLD</b> | UniDirectional Link Detection      |
| <b>UDP</b>  | User Datagram Protocol             |

---

**V**

|             |                          |
|-------------|--------------------------|
| <b>VACL</b> | VLAN access control list |
|-------------|--------------------------|

|              |                                                |
|--------------|------------------------------------------------|
| <b>VAD</b>   | voice activity detection                       |
| <b>VBR</b>   | variable bit rate                              |
| <b>VC</b>    | virtual circuit                                |
| <b>VCC</b>   | virtual channel connection                     |
| <b>VCD</b>   | virtual circuit descriptor                     |
| <b>VCI</b>   | virtual channel identifier ( <b>ATM only</b> ) |
| <b>VCN</b>   | virtual circuit number                         |
| <b>VFC</b>   | voice feature card                             |
| <b>VFC</b>   | VoIP feature card                              |
| <b>VG</b>    | voice gateway                                  |
| <b>VIC</b>   | voice interface card                           |
| <b>VIP</b>   | Versatile Interface Processor                  |
| <b>VLAN</b>  | virtual LAN                                    |
| <b>VMAC</b>  | Virtual MAC                                    |
| <b>VMPS</b>  | VLAN Membership Policy Server                  |
| <b>VNM</b>   | Voice Network Manager                          |
| <b>VoIP</b>  | Voice over IP                                  |
| <b>VPDN</b>  | Virtual Private Dialup Network                 |
| <b>VPI</b>   | virtual path identifier                        |
| <b>VPN</b>   | Virtual Private Network                        |
| <b>VPNv4</b> | Virtual Private Network version 4              |
| <b>VSI</b>   | Virtual Switch Interface                       |
| <b>VSM</b>   | Voice Service Manager                          |
| <b>VT</b>    | virtual terminal                               |
| <b>VTAM</b>  | virtual telecommunications access method       |
| <b>VTP</b>   | VLAN Trunk Protocol                            |
| <b>VTSP</b>  | voice telephony service provider               |
| <b>VTT</b>   | voltage termination                            |

---

**W**

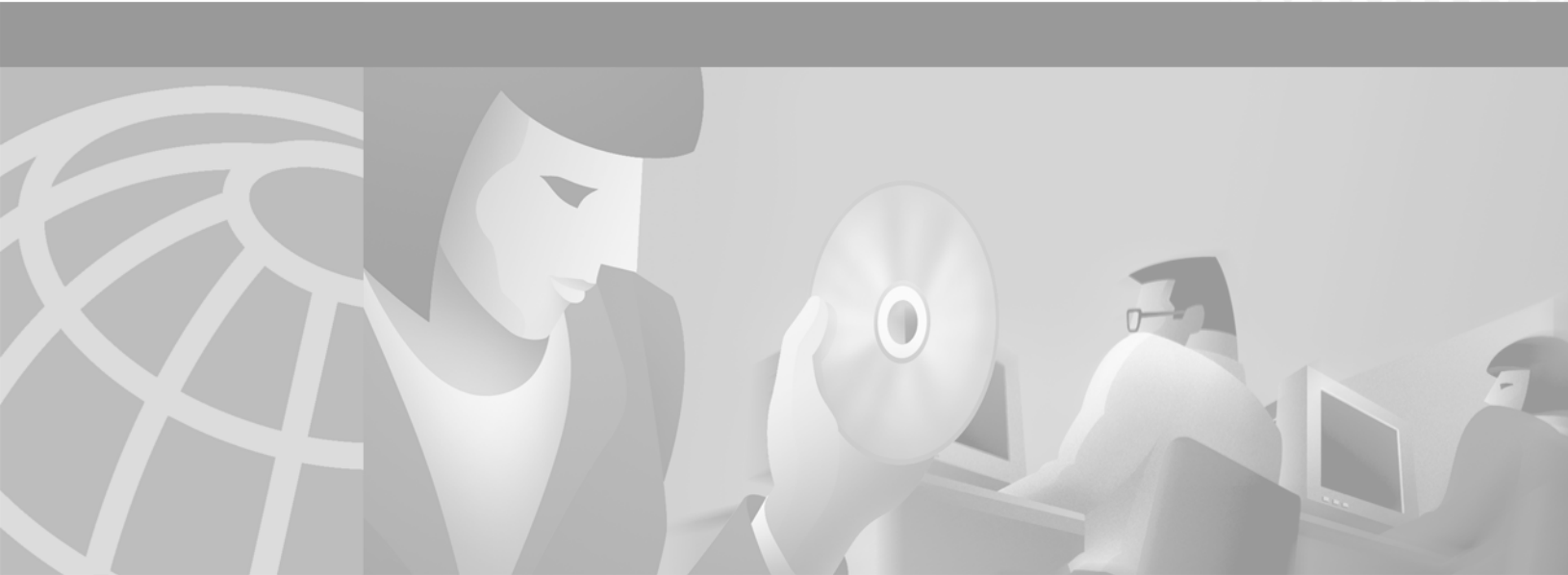
|             |                                  |
|-------------|----------------------------------|
| <b>WCCP</b> | Web Cache Communication Protocol |
| <b>WCS</b>  | writable control store           |
| <b>WIC</b>  | WAN interface card               |
| <b>WLM</b>  | Workload Manager                 |
| <b>WWW</b>  | World Wide Web                   |

---

**X**

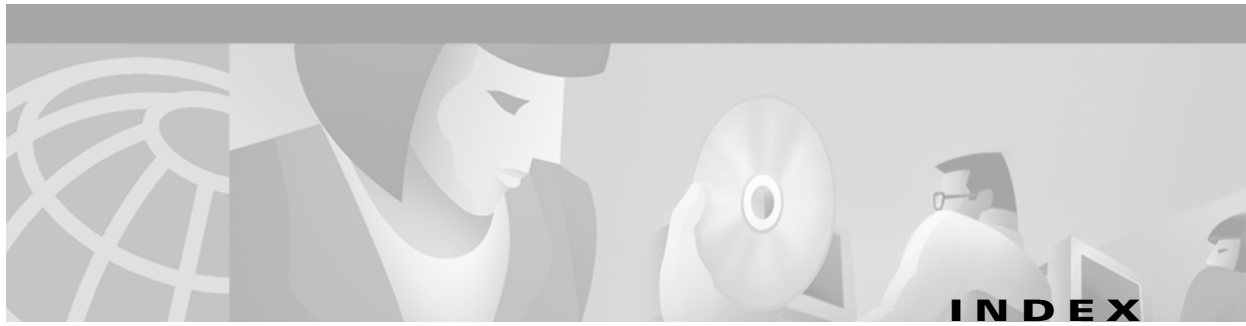
|                |                                |
|----------------|--------------------------------|
| <b>XCA</b>     | external communication adapter |
| <b>XDR</b>     | eXternal Data Representation   |
| <b>XID</b>     | exchange identification        |
| <b>XNS</b>     | Xerox Network Systems          |
| <b>XOT</b>     | X.25-over-TCP                  |
| <b>XTagATM</b> | extended tag ATM               |





## Index





%NSP\_APS-4-SWITCH SEM2-19  
%NSPINT-3-INTERNAL\_ERROR SEM2-19  
%NSPINT-5-SPURIOUS SEM2-20  
%NSP\_OIR-3-ALOC\_OIR\_EVENT SEM2-20  
%NSP\_OIR-3-BADCARD SEM2-20  
%NSP\_OIR-3-BAD\_FULL\_INS SEM2-20  
%NSP\_OIR-3-BAD\_HALF\_INS SEM2-21  
%NSP\_OIR-3-BADINS SEM2-21  
%NSP\_OIR-6-FULL\_CINS SEM2-21  
%NSP\_OIR-6-FULL\_CREM SEM2-21  
%NSP\_OIR-6-FULL\_ONLINE SEM2-21  
%NSP\_OIR-6-HALF\_CINS SEM2-21  
%NSP\_OIR-6-HALF\_CREM SEM2-22  
%NSP\_OIR-6-HALF\_ONLINE SEM2-22  
%NSP\_OIR-3-INV CARD SEM2-22  
%NSP\_OIR-3-INV\_HWCFG1 SEM2-22  
%NSP\_OIR-3-INV\_HWCFG2 SEM2-22  
%NSP\_OIR-4-INV\_REDCFG SEM2-22  
%NSP\_OIR-3-LONGSTALL SEM2-23  
%NSP\_OIR-4-UNEXPECTED\_OFFLINE SEM2-23  
%OIR-6-CONSOLE SEM2-23  
%OIR-4-NOEOIR SEM2-23  
%OIR-3-PWRCYCLE SEM2-24  
%OIR-3-SEATED SEM2-24  
%OIR-3-UNKNOWN SEM2-24  
%OOBP-4-ASYNC\_NO\_RSP SEM2-24  
%OOBP-4-OOBP\_CANT\_BE\_USED SEM2-24  
%OOBP-4-TIMEOUT\_AT\_WRONG\_STATE SEM2-25  
%OSPF-5-ADJCHG SEM2-25  
%OSPF-6-AREACHG SEM2-25  
%OSPF-6-BADCHKSUM SEM2-25  
%OSPF-4-BADLENGTH SEM2-26  
%OSPF-4-BADLSATYPE SEM2-26  
%OSPF-4-CONFLICTING\_LSAID SEM2-26  
%OSPF-3-DBEXIST SEM2-26  
%OSPF-3-DUP\_RTRID SEM2-27  
%OSPF-4-DUP\_RTRID\_AREA SEM2-27  
%OSPF-4-DUP\_RTRID\_NBR SEM2-27  
%OSPF-4-ERRRCV SEM2-27  
%OSPF-3-INIT\_IDB SEM2-27  
%OSPF-3-INTERNALERR SEM2-28  
%OSPF-3-NOBACKBONE SEM2-28  
%OSPF-3-NOCONNDB SEM2-28  
%OSPF-3-NOLSA SEM2-28  
%OSPF-4-NONEIGHBOR SEM2-28  
%OSPF-4-NORTRID SEM2-29  
%OSPF-3-NOSELF SEM2-29  
%OSPF-6-NOSRCPDB SEM2-29  
%OSPF-4-NOTREDIST4 SEM2-29  
%OSPF-4-NOTREDIST5 SEM2-30  
%OSPF-3-RDB\_NO\_LSA SEM2-30  
%OSPF-3-RECONF\_VL SEM2-30  
%OSPF-3-UNKNOWNSTATE SEM2-30  
%OSPF-4-VIRTUAL\_IN\_NON\_BACKBONE SEM2-31  
%PA-2-BADDAT SEM2-31  
%PA-2-BADIDB SEM2-31  
%PA-2-BADINTERFACE SEM2-32  
%PA-2-BADPA SEM2-32  
%PA-2-BADPA2 SEM2-32  
%PA-2-BADPABAY SEM2-32  
%PA-2-BADPASCB SEM2-32  
%PA-2-BADPINST SEM2-33  
%PA-2-BADVCONT SEM2-33  
%PA-3-BRINGUPFAIL SEM2-33  
%PA-3-CONFIG SEM2-33  
%PA-3-DEACTIVATED SEM2-33  
%PA-2-ILLEGALPA SEM2-34  
%PA-2-INCORRECTBRIDGEREG SEM2-34  
%PA-3-NOTSUPPORTED SEM2-34  
%PA-2-PABRIDGE SEM2-34  
%PA-3-PACREATE SEM2-34  
%PA-2-PARECUR SEM2-35  
%PA-4-PCIVALID SEM2-35  
%PA-2-QOVERFLOW SEM2-35  
%PA-3-REVNOTSUPPORTED SEM2-35  
%PA-0-RUPTCONFLICT SEM2-36

%PA-2-UNDEFIO SEM2-36  
%PA-2-UNDEFPA SEM2-36  
%PA-2-UNDEFPABRIDGE SEM2-36  
%PAD-3-GETLINE SEM2-37  
%PAD-2-INTR SEM2-37  
%PAD-2-PUTSETUP SEM2-37  
%PAMMBOX-3-BADCONFIG SEM2-37  
%PAMMBOX-3-BADRXFRMHDR SEM2-38  
%PAMMBOX-3-BADSTATUS SEM2-38  
%PAMMBOX-3-INITERROR SEM2-38  
%PAMMBOX-3-PLATADDSLOT SEM2-38  
%PAMMBOX-3-PLATDELETESLOT SEM2-38  
%PAMMBOX-3-RXBADSTATE SEM2-39  
%PAMMBOX-3-RXNOIDB SEM2-39  
%PAMMBOX-3-RXQWAKEUPREASON SEM2-39  
%PAMMBOX-3-TXBADSTATE SEM2-39  
%PAMMBOX-3-TXOUTERR SEM2-39  
%PAMMBOX-3-TXPAKERR SEM2-40  
%PAMMBOX-3-TXRXBADINITSTATE SEM2-40  
%PAMMBOX-3-UNEXPECTEDINT SEM2-40  
%PARSER-4-BADCFG SEM2-40  
%PARSER-4-BADRANGE SEM2-41  
%PARSER-3-BADSUBCMD SEM2-41  
%PARSER-3-CREATEINT SEM2-41  
%PARSER-2-INTDISABLE SEM2-41  
%PARSER-4-INVLDLINE SEM2-41  
%PARSER-4-INVLDNVGEN SEM2-42  
%PARSER-4-LINKPOINT SEM2-42  
%PARSER-4-MULFUNCS SEM2-42  
%PARSER-4-MULTIPLEIFS SEM2-42  
%PARSER-3-NOLINK SEM2-42  
%PARSER-4-NUMHELP SEM2-43  
%PARSER-4-NVGEN SEM2-43  
%PARSER-4-PROTOADDR SEM2-43  
%PERUSER-3-ISDNINTF SEM2-43  
%PF-4-MEM\_UNAVAIL SEM2-44  
%PF-4-PROC\_START\_ERR SEM2-44  
%PF-5-TRUNKPFOFF SEM2-44  
%PF-4-UNKN\_ERR SEM2-44  
%PGM-6-ADDR\_ERR SEM2-45  
%PGM-3-EXP\_TSI\_SQN\_ERR SEM2-45  
%PGM-3-PAK\_ALLOC\_ERR SEM2-45  
%PGM-6-PAK\_IIF\_FIXUP SEM2-45  
%PGM-6-PAK\_MALFORMED\_ERR SEM2-45  
%PGM-6-QUEUE\_FULL SEM2-46  
%PGM-3-RTX\_STATE\_ALLOC\_ERR SEM2-46  
%PGM-3-RTX\_STATE\_FREE\_ERR SEM2-46  
%PGM-6-TSI\_GROUP\_CHANGE SEM2-46  
%PGM-6-TSI\_SOURCE\_CHANGE SEM2-46  
%PGMHOST-6-INPUT\_PACKET\_ERR SEM2-47  
%PIM-4-DEPRECATED\_HELLO\_TLV SEM2-47  
%PIM-6-INVALID\_RP\_JOIN SEM2-47  
%PIM-1-INVALID\_RP\_REG SEM2-47  
%PIM-1-INVALID\_SRC\_REG SEM2-48  
%PIM-6-REG\_ENCAP\_INVALID SEM2-48  
%PIM-6-SA\_ENCAP\_INVALID SEM2-48  
%PIM-1-SR\_INTERVAL\_SETTING\_ERR SEM2-48  
%PLATFORM-4-COOKIE SEM2-48  
%PLATFORM-3-FATALPXF SEM2-49  
%PLATFORM-4-NOCPUVER SEM2-49  
%PLATFORM-3-NOMAC SEM2-49  
%PLATFORM-3-PACONFIG SEM2-49  
%PLATFORM-4-RECALLED\_NPE SEM2-49  
%PM-4-BAD\_APP\_ID SEM2-50  
%PM-4-BAD\_APP\_REQ SEM2-50  
%PM-4-BAD\_CARD\_COOKIE SEM2-50  
%PM-4-BAD\_CARD\_SLOT SEM2-50  
%PM-4-BAD\_COOKIE SEM2-51  
%PM-4-BAD\_PORT\_COOKIE SEM2-51  
%PM-4-BAD\_PORT\_NUMBER SEM2-51  
%PM-4-BAD\_VLAN\_COOKIE SEM2-51  
%PM-4-BAD\_VLAN\_ID SEM2-52  
%PM-4-ERR\_DISABLE SEM2-52  
%PM-4-ERR\_RECOVER SEM2-52  
%PM-2-NOMEM SEM2-52  
%PM-4-TOO\_MANY\_APP SEM2-53  
%PM\_MODEM\_HIST-7-CSM\_IC\_CALLED\_NUM SEM2-53  
%PM\_MODEM\_HIST-7-CSM\_IC\_CALLING\_NUM SEM2-53  
%PM\_MODEM\_HIST-7-CSM\_OC\_CALLED\_NUM SEM2-53  
%PM\_MODEM\_HIST-7-MODEM\_DYNAMIC\_EVT SEM2-53  
%PM\_MODEM\_HIST-7-MODEM\_END\_CONN\_EVT SEM2-54  
%PM\_MODEM\_HIST-7-MODEM\_ROS\_EVT SEM2-54  
%PM\_MODEM\_HIST-7-MODEM\_STATE\_EVT SEM2-54  
%PM\_MODEM\_HIST-7-MODEM\_STATIC\_EVT SEM2-54  
%PM\_MODEM\_HIST-7-PORT\_STATE\_REACHED\_NTF\_EVT SEM2-54  
%PM\_MODEM\_HIST-7-TRACE\_HDR SEM2-55  
%PM\_MODEM\_HIST-7-UNKNOWN\_EVENT SEM2-55

%PM\_MODEM\_HIST-7-UNKNOWN\_FRAME SEM2-55  
 %PM\_MODEM\_MAINT-4-B2BABORT SEM2-55  
 %PM\_MODEM\_MAINT-5-B2BCONNECT SEM2-56  
 %PM\_MODEM\_MAINT-5-B2BINIT SEM2-56  
 %PM\_MODEM\_MAINT-5-B2BMODEMS SEM2-56  
 %PM\_MODEM\_MAINT-1-BADEVENT SEM2-56  
 %PM\_MODEM\_MAINT-1-BADMODEM SEM2-56  
 %PM\_MODEM\_MAINT-4-BADMODEMS SEM2-57  
 %PM\_MODEM\_MAINT-1-INITFAIL SEM2-57  
 %PM\_MODEM\_MAINT-5-MODEM\_OK SEM2-57  
 %PNNI-4-ADDRESS\_EXIST SEM2-57  
 %PNNI-4-ATM\_SYS\_ERROR SEM2-58  
 %PNNI-4-BADPACKET SEM2-58  
 %PNNI-4-BADROUTEREQ SEM2-58  
 %PNNI-4-CONFIG\_ERROR SEM2-58  
 %PNNI-7-DEBUG SEM2-58  
 %PNNI-4-DUPLICATE\_NODE\_ID SEM2-58  
 %PNNI-6-INFO SEM2-59  
 %PNNI-3-INTERNAL\_ERROR SEM2-59  
 %PNNI-3-INVALID\_MEM SEM2-59  
 %PNNI-2-NO\_INTERNAL\_NUMBER SEM2-59  
 %PNNI-2-SPF\_ERROR SEM2-59  
 %PORT-6-NULL\_OBJ SEM2-60  
 %PORT-6-PORT\_RECOVERY SEM2-60  
 %PORT-6-SESSION\_RECOVERY SEM2-60  
 %PORT-6-SM\_PORT\_CLEARED SEM2-60  
 %POSDW-1-DISCOVER SEM2-60  
 %POSDW-1-INITFAIL SEM2-61  
 %POSDW-3-NOTPOSDW SEM2-61  
 %POSDW-3-OWNERR SEM2-61  
 %POSDW-3-UNSUPPORTED SEM2-61  
 %POSLC-3-4302 SEM2-63  
 %POSLC-3-APS SEM2-63  
 %POSLC-3-BMAENG SEM2-63  
 %POSLC-3-BMAPAR SEM2-63  
 %POSLC-1-INITFAIL SEM2-64  
 %POSLC-3-LINKBADEVT SEM2-64  
 %POSLC-3-LINKNOPRC SEM2-64  
 %POSLC-3-LINKPROC SEM2-64  
 %POSLC-3-POSENG SEM2-65  
 %POSLC-3-RXPOSTO SEM2-65  
 %POSLC-3-SOP SEM2-65  
 %POSLC-3-SRAMPAR SEM2-65  
 %POSLC-3-TXPOSTO SEM2-66  
 %POT1E1-3-BADMSG SEM2-66  
 %POT1E1-1-CONFIGURE SEM2-66  
 %POT1E1-1-DISCOVER SEM2-66  
 %POT1E1-1-DWNLDCKSM SEM2-67  
 %POT1E1-1-DWNLDFAIL SEM2-67  
 %POT1E1-3-ERROR SEM2-67  
 %POT1E1-3-FWFATAL SEM2-67  
 %POT1E1-1-INITFAIL SEM2-67  
 %POT1E1-3-LOVEFAIL SEM2-68  
 %POT1E1-3-MBOXRECV SEM2-68  
 %POT1E1-3-MBOXSEND SEM2-68  
 %POT1E1-3-MBOXSENDP SEM2-68  
 %POT1E1-3-MBXREAD SEM2-68  
 %POT1E1-1-NOTCMLPT SEM2-69  
 %POT1E1-3-NOTPLX SEM2-69  
 %POT1E1-3-NOTPOT1E1 SEM2-69  
 %POT1E1-3-OWNERR SEM2-69  
 %POT1E1-3-PANIC SEM2-69  
 %POT1E1-2-POT1E1FWCRASHED SEM2-70  
 %POT1E1-2-POT1E1FWCRASHEDINFO SEM2-70  
 %POT1E1-2-POTBADCMD SEM2-70  
 %POT1E1-1-STARTFAIL SEM2-70  
 %POT1E1-1-STOPFAIL SEM2-70  
 %POT1E1-3-TOOSMALL SEM2-71  
 %POTS-4-FSM\_ERROR SEM2-71  
 %POTS-4-INVALID\_EVENT SEM2-71  
 %POTS-4-INVALID\_PORT SEM2-71  
 %POTS-1-NOMEMORY SEM2-71  
 %POTS-1-NULL\_COMMON\_PTR SEM2-72  
 %POTS-4-PROCESS\_EVENT\_ERROR SEM2-72  
 %POTS-4-QUEUE\_EMPTY SEM2-72  
 %POTS-4-UNSUPPORTED\_COUNTRY SEM2-72  
 %POTS-4-UNSUPPORTED\_OPTION SEM2-72  
 %POTS-4-UNSUPPORTED\_RING\_FREQ SEM2-72  
 %POTS-4-UNSUPPORTED\_RX\_LOSS SEM2-73  
 %POTS-4-UNSUPPORTED\_SIGNAL\_TYPE SEM2-73  
 %POTS-4-UNSUPPORTED\_TX\_GAIN SEM2-73  
 %POTS-4-VDEV\_INIT\_ERROR SEM2-73  
 %PPP-3-AUXFAST SEM2-73  
 %PPP-4-IPXNET SEM2-74  
 %PPP-4-NOAPPOINT SEM2-74  
 %PPP-4-NOCLEAR SEM2-74  
 %PPP-4-NOEXTTACACS SEM2-74  
 %PPP-4-NOMAC SEM2-74

%PPP-4-NOREGISTER SEM2-75  
%PPP-4-NOSUCHREQ SEM2-75  
%PQII-1-BADHDXFSM SEM2-75  
%PQII-1-CTSLOST SEM2-75  
%PQII-1-INITFAIL SEM2-76  
%PQII-1-LINEFLAP SEM2-76  
%PQII-1-NOMEMORY SEM2-76  
%PQII-3-OWNERR SEM2-76  
%PQII-1-TOOBIG SEM2-77  
%PQII-1-TOOSMALL SEM2-77  
%PQII-1-UNDERFLO SEM2-77  
%PQII-1-UNEXPECTED\_INTERRUPT SEM2-77  
%PQII-3-UNKNOWN\_SCCS SEM2-77  
%PQII-1-UNKNOWN\_WIC SEM2-78  
%PQII-1-UNSUPPORTED\_CONFIG SEM2-78  
%PQII-1-WRONG\_SLOT SEM2-78  
%PQUICC-1-BADHDXFSM SEM2-78  
%PQUICC-5-COLL SEM2-78  
%PQUICC-1-CTSLOST SEM2-79  
%PQUICC-5-HBEAT SEM2-79  
%PQUICC-1-INITFAIL SEM2-79  
%PQUICC-5-LATECOLL SEM2-79  
%PQUICC-1-LINEFLAP SEM2-79  
%PQUICC-1-LOSTCARR SEM2-80  
%PQUICC-1-NOMEMORY SEM2-80  
%PQUICC-3-OWNERR SEM2-80  
%PQUICC-1-TOOBIG SEM2-80  
%PQUICC-1-TOOSMALL SEM2-81  
%PQUICC-1-TXERR SEM2-81  
%PQUICC-3-UNDERFLO SEM2-81  
%PQUICC-1-UNEXPECTED\_INTERRUPT SEM2-81  
%PQUICC-3-UNKNOWN\_SCCS SEM2-82  
%PQUICC-1-UNKNOWN\_WIC SEM2-82  
%PQUICC-1-UNSUPPORTED\_CONFIG SEM2-82  
%PQUICC-1-WRONG\_SLOT SEM2-82  
%PQUICC\_ASYNC-3-CTSLOST SEM2-82  
%PQUICC\_ASYNC\_NOMEM-3-NOMEMORY SEM2-83  
%PQUICC\_ETHER-5-COLL SEM2-83  
%PQUICC\_ETHER-5-HBEAT SEM2-83  
%PQUICC\_ETHER-1-INITFAIL SEM2-83  
%PQUICC\_ETHER-5-LATECOLL SEM2-84  
%PQUICC\_ETHER-1-LOSTCARR SEM2-84  
%PQUICC\_ETHER-1-TXERR SEM2-84  
%PQUICC\_ETHER-3-UNDERFLO SEM2-84  
%PQUICC\_ETHERNET-1-NOMEMORY SEM2-85  
%PQUICC\_ETHERNET-1-TXERR SEM2-85  
%PQUICC\_FE-4-BABBLE SEM2-85  
%PQUICC\_FE-5-COLL SEM2-85  
%PQUICC\_FE-1-INITFAIL SEM2-86  
%PQUICC\_FE-1-INITFAILP SEM2-86  
%PQUICC\_FE-5-LATECOLL SEM2-86  
%PQUICC\_FE-5-LOSTCARR SEM2-86  
%PQUICC\_FE-1-MEMERR SEM2-86  
%PQUICC\_FE-2-NOISL SEM2-87  
%PQUICC\_FE-3-OVERFLO SEM2-87  
%PQUICC\_FE-3-OWNERR SEM2-87  
%PQUICC\_FE-1-SHOWFAIL SEM2-87  
%PQUICC\_FE-3-UNDERFLO SEM2-87  
%PQUICC\_SERIAL-3-CTSLOST SEM2-88  
%PQUICC\_SERIAL-1-INITFAIL SEM2-88  
%PQUICC\_SERIAL-5-LINEFLAP SEM2-88  
%PQUICC\_SERIAL-5-LOSTCARR SEM2-88  
%PQUICC\_SERIAL-3-OVERFLO SEM2-89  
%PQUICC\_SERIAL-3-UNDERFLO SEM2-89  
%PS-3-DCOUTPUTVOLTFAIL SEM2-89  
%PS-3-DCOUTPUTVOLTOK SEM2-89  
%PS-1-INITSYS SEM2-90  
%PS-3-INPUTVOLTFAIL SEM2-90  
%PS-3-INPUTVOLTOK SEM2-90  
%PS-3-MULTFAIL SEM2-90  
%PS-3-OVERTEMP\_OK SEM2-90  
%PS-3-PSOK SEM2-91  
%PS-3-THERMAL SEM2-91  
%PS-3-THERMOK SEM2-91  
%PV-6-PV\_MSG SEM2-91  
%PW\_WATCHER-3-NO\_RESPONSE\_STARTUP\_REQ  
SEM2-92  
%PW\_WATCHER-6-UNEXPECTED\_DOWNLOAD SEM2-92  
%PXF-2-BADCHKSUM SEM2-92  
%PXF-2-BADREAD SEM2-93  
%PXF-2-DISABLED SEM2-93  
%PXF-2-DWNLOAD SEM2-93  
%PXF-2-EXCEPTION SEM2-93  
%PXF-2-HDRCORRUPT SEM2-93  
%PXF-2-INVALID SEM2-94  
%PXF-2-NONEXIST SEM2-94  
%PXF-2-RESTARTED SEM2-94  
%PXF-2-TALLOCFAIL SEM2-94

%PXF-2-WRONGHARD SEM2-94  
 %QA-3-ALLOC SEM2-95  
 %QA-3-DIAG SEM2-95  
 %QEM-3-DISCOVER SEM2-95  
 %QLLC-3-BADOPCODE SEM2-96  
 %QLLC-3-BADQLLCSTATE SEM2-96  
 %QLLC-3-BADRSRBOPCODE SEM2-96  
 %QLLC-3-BADSTATE SEM2-96  
 %QLLC-3-BADSTATEEVENT SEM2-96  
 %QLLC-3-BAD\_XID SEM2-97  
 %QLLC-3-DIFFPRTR SEM2-97  
 %QLLC-3-GENERRMSG SEM2-97  
 %QLLC-3-IFRAME SEM2-97  
 %QLLC-3-INCALL\_CFG SEM2-97  
 %QLLC-3-INCALL\_NO\_PARTNER SEM2-98  
 %QLLC-3-LNXNOTFOUND SEM2-98  
 %QLLC-3-NOLLC2 SEM2-98  
 %QLLC-3-NOMACADDR SEM2-98  
 %QLLC-3-NOMEM SEM2-98  
 %QLLC-3-NONULLXID SEM2-99  
 %QLLC-3-NOPAKENQ SEM2-99  
 %QLLC-4-NOQLLC SEM2-99  
 %QLLC-3-NO\_QLLCBUFFER SEM2-99  
 %QLLC-3-NO\_QSR SEM2-99  
 %QLLC-3-NO\_RESOURCE SEM2-99  
 %QLLC-3-NOXID2 SEM2-100  
 %QLLC-3-NULLPTR SEM2-100  
 %QLLC-3-PARTNER\_MISMATCH SEM2-100  
 %QLLC-3-QLLCMAP\_ERR SEM2-100  
 %QM-2-ACL\_FAILURE SEM2-100  
 %QM-2-AGGREG\_FAILURE SEM2-101  
 %QM-4-AGGREG\_PLC\_IGNORED SEM2-101  
 %QM-2-BAD\_MESSAGE SEM2-101  
 %QM-2-BAD\_TLV SEM2-101  
 %QM-2-DSCP\_NE SEM2-102  
 %QM-3-ERROR SEM2-102  
 %QM-3-ERROR\_STAT SEM2-102  
 %QM-4-IDB\_MODE\_CHANGE\_SERV\_POLICY SEM2-102  
 %QM-2-MICROFLOW\_FAILURE SEM2-103  
 %QM-2-NO\_AGGREG\_PLC SEM2-103  
 %QM-2-NO\_AGGREG\_PLC\_IF SEM2-103  
 %QM-2-NO\_FLOW\_PLC SEM2-103  
 %QM-2-SEQUENCE SEM2-104  
 %QM-2-TCAM\_BAD\_LOU SEM2-104  
 %QM-4-TCAM\_CAPMAP SEM2-104  
 %QM-4-TCAM\_ENTRY SEM2-104  
 %QM-2-TCAM\_ERROR SEM2-105  
 %QM-4-TCAM\_LABEL SEM2-105  
 %QM-4-TCAM\_LOU SEM2-105  
 %QM-2-TCAM\_MEMORY SEM2-105  
 %QUICC-1-BADHDXFSM SEM2-106  
 %QUICC-1-CTSLOST SEM2-106  
 %QUICC-1-INITFAIL SEM2-106  
 %QUICC-1-LINEFLAP SEM2-106  
 %QUICC-1-NOMEMORY SEM2-107  
 %QUICC-3-OWNERR SEM2-107  
 %QUICC-1-TOOBIG SEM2-107  
 %QUICC-1-TOOSMALL SEM2-107  
 %QUICC-3-UCODE\_REV\_UNKN SEM2-108  
 %QUICC-1-UNDERFLO SEM2-108  
 %QUICC-1-UNEXPECTED\_INTERRUPT SEM2-108  
 %QUICC-3-UNKNOWN\_SCCS SEM2-108  
 %QUICC-1-UNKNOWN\_WIC SEM2-108  
 %QUICC-1-UNSUPPORTED\_CONFIG SEM2-109  
 %QUICC-1-WRONG\_SLOT SEM2-109  
 %QUICC\_ASYNC-3-CTSLOST SEM2-109  
 %QUICC\_ETHER-5-COLL SEM2-109  
 %QUICC\_ETHER-5-HBEAT SEM2-110  
 %QUICC\_ETHER-1-INITFAIL SEM2-110  
 %QUICC\_ETHER-5-LATECOLL SEM2-110  
 %QUICC\_ETHER-1-LOSTCARR SEM2-110  
 %QUICC\_ETHER-3-UNDERFLO SEM2-111  
 %QUICC\_SERIAL-3-CTSLOST SEM2-111  
 %QUICC\_SERIAL-1-INITFAIL SEM2-111  
 %QUICC\_SERIAL-5-LINEFLAP SEM2-111  
 %QUICC\_SERIAL-5-LOSTCARR SEM2-112  
 %QUICC\_SERIAL-3-UNDERFLO SEM2-112  
 %RAC-3-RACNOIPL SEM2-112  
 %RAC-3-RACNOQ SEM2-112  
 %RADIO-4-BAD\_IF\_PIC SEM2-113  
 %RADIO-4-BAD\_RF\_PIC SEM2-113  
 %RADIO-4-CHECKSUM\_ERR SEM2-113  
 %RADIO-5-CLEAR\_METRICS SEM2-113  
 %RADIO-5-CONFIG\_HW SEM2-114  
 %RADIO-5-CONFIG\_MISMATCH SEM2-114  
 %RADIO-4-DSPHPITIMEOUT SEM2-114  
 %RADIO-4-DSPINDERR SEM2-114  
 %RADIO-4-DSPSPURRESP SEM2-114

%RADIO-4-DSPULOFLOW SEM2-115  
%RADIO-4-FPGADONEPINLOW SEM2-115  
%RADIO-4-FPGAINITPINHIGH SEM2-115  
%RADIO-4-FPGAINITPINLOW SEM2-115  
%RADIO-4-IF\_COMM SEM2-116  
%RADIO-4-IF\_OSC SEM2-116  
%RADIO-5-IMAGE\_BAD\_CRC SEM2-116  
%RADIO-6-IMAGE\_NOT\_FOUND SEM2-116  
%RADIO-5-IMAGE\_TIMEOUT SEM2-116  
%RADIO-5-LOCAL\_IN\_SYNC SEM2-117  
%RADIO-5-LOCAL\_NO\_CW SEM2-117  
%RADIO-5-LOCAL\_NO\_FREQ SEM2-117  
%RADIO-5-LOCAL\_NO\_SYNC SEM2-117  
%RADIO-5-LOCAL\_NO\_TRANSMIT SEM2-117  
%RADIO-5-LOCAL\_NO\_VITERBI SEM2-118  
%RADIO-5-METRICS\_THRESH SEM2-118  
%RADIO-4-NEWER\_IF\_EEPROM SEM2-118  
%RADIO-4-NEWER\_RF\_EEPROM SEM2-118  
%RADIO-4-NO\_HWCAP\_FIELD SEM2-118  
%RADIO-4-NO\_IMAGE SEM2-119  
%RADIO-4-PHY\_REQ SEM2-119  
%RADIO-5-PHY\_RETRY SEM2-119  
%RADIO-4-PHY\_SYNC\_FAIL SEM2-119  
%RADIO-5-PHY\_SYNC\_LOST SEM2-119  
%RADIO-4-PHY\_SYNC\_OK SEM2-119  
%RADIO-4-PHY\_SYNC\_REOK SEM2-120  
%RADIO-5-REMOTE\_LOST\_SYNC SEM2-120  
%RADIO-5-REMOTE\_NO\_SYNC SEM2-120  
%RADIO-4-RF\_AGC SEM2-120  
%RADIO-4-RF\_ANTENNA SEM2-120  
%RADIO-4-RF\_COMM SEM2-120  
%RADIO-4-RF\_OSC SEM2-121  
%RADIO-2-RF\_OVERTEMP SEM2-121  
%RADIO-4-RF\_TEMP SEM2-121  
%RADIO-4-RF\_VOLT SEM2-121  
%RADIO-3-SELF\_TEST\_FAILED SEM2-121  
%RADIO-6-SELF\_TEST\_SUCCESS SEM2-121  
%RADIO-5-THRESHOLD SEM2-122  
%RADIO\_DRIVER-1-DISCOVER SEM2-122  
%RADIO\_DRIVER-3-DMADESCSEQERR SEM2-122  
%RADIO\_DRIVER-3-LOCALBUSERR SEM2-122  
%RADIO\_DRIVER-3-NOTRADIO SEM2-123  
%RADIO\_DRIVER-3-PCIPERROR SEM2-123  
%RADIO\_DRIVER-3-PCITARGETABORT SEM2-123  
%RADIUS-3-ALLDEADSERVER SEM2-123  
%RADIUS-3-FORKFAIL SEM2-124  
%RADIUS-3-FORMATLONG SEM2-124  
%RADIUS-6-GETPOOLS SEM2-124  
%RADIUS-6-GETROUTES SEM2-124  
%RADIUS-3-IDENTFAIL SEM2-124  
%RADIUS-6-IDENTSAVE SEM2-125  
%RADIUS-3-NOHOSTNAME SEM2-125  
%RADIUS-4-NOSERV SEM2-125  
%RADIUS-3-NOSERVERS SEM2-125  
%RADIUS-3-OVERRUN SEM2-125  
%RADIUS-3-PICKERR SEM2-125  
%RADIUS-3-SECRETDEFINEFAILED SEM2-126  
%RADIUS-6-SERVERALIVE SEM2-126  
%RADIUS-4-SERVREF SEM2-126  
%RADIX-3-ADDMASK SEM2-126  
%RADIX-3-BADTREE SEM2-126  
%RADIX-3-DELETE SEM2-127  
%RADIX-2-INIT SEM2-127  
%RADIX-3-NOMEMORY SEM2-127  
%RADIX-4-ORPHAN SEM2-127  
%RAIKO-3-BAD\_MGMT\_INT\_HNDLR\_CB\_REG SEM2-127  
%RAIKO-3-BRIDGE\_PCI\_ERROR SEM2-128  
%RAIKO-3-DFC\_ID\_ZERO SEM2-128  
%RAIKO-3-MGMT\_INT\_HNDLR\_INST\_FAILED SEM2-128  
%RAIKO-3-MGMT\_INT\_UNCLAIMED SEM2-128  
%RAIKO-3-NO\_MGMT\_INT\_HNDLR\_CB\_ENTRY SEM2-129  
%RAIKO-3-UNEXPECTED\_MGMT\_INT\_HNDLR SEM2-129  
%RCMD-4-RCMDDNSFAIL SEM2-129  
%RCMD-4-RCPATTEMPTED SEM2-129  
%RCMD-4-RSHATTEMPTED SEM2-130  
%RCMD-4-RSHPORTATTEMPT SEM2-130  
%Regen-3-BADADDR SEM2-130  
%Regen-3-BADADDR2 SEM2-130  
%Regen-3-BADBAYDEV SEM2-131  
%Regen-3-BADDEVNO SEM2-131  
%Regen-3-BADNV SEM2-131  
%Regen-3-BADPA SEM2-131  
%Regen-3-BADPCIRD SEM2-132  
%Regen-3-BADPCIWR SEM2-132  
%Regen-3-NOMAC SEM2-132  
%Regen-3-NVERASEFAIL SEM2-132  
%Regen-1-OVERTEMP SEM2-133



%Regen\_MAINBOARD\_ASYNC\_PQUICC-3-NOMEMORY SEM2-133  
 %REGISTRY-3-STUB\_CHK\_OVERWRITE SEM2-133  
 %RESOURCE\_MON-1-INITSYS SEM2-134  
 %RESOURCE\_MON-1-RSCMON\_BAD\_DATA SEM2-134  
 %RESOURCE\_MON-1-RSCMON\_CLIENT\_Q SEM2-134  
 %RESYNCH-6-INFO SEM2-135  
 %RESYNCH-3-INVLD\_IN\_0 SEM2-135  
 %RESYNCH-3-INVLD\_IN\_D SEM2-135  
 %RESYNCH-3-MEM\_ALLOC\_FAIL SEM2-135  
 %RESYNCH-3-RET\_ERROR SEM2-135  
 %RESYNCH-6-UPDATE\_DELETE SEM2-136  
 %RESYNCH-3-UPDATE\_NAKED SEM2-136  
 %RESYNCH-6-UPDATE\_OK SEM2-136  
 %RESYNCH-3-UPD\_RESP\_UNKNOWN SEM2-136  
 %RESYNCH-4-WARNING SEM2-136  
 %RIP-3-NOSOCKET SEM2-136  
 %RLM-3-INIT SEM2-137  
 %RLM-4-LINK SEM2-137  
 %RLM-4-NOBUF SEM2-137  
 %RM-3-BADACCT SEM2-137  
 %RM-3-BADCALL SEM2-138  
 %RM-3-BADRG SEM2-138  
 %RM-3-BOUNDARY SEM2-138  
 %RM-3-NORESP SEM2-138  
 %RM-3-OUTOFBUFFS SEM2-138  
 %RM-3-RGINFO SEM2-139  
 %RM-3-WAVL SEM2-139  
 %RM-3-ZEROVAL SEM2-139  
 %ROUTEMAP\_IPC-2-NOMEMORY SEM2-139  
 %ROUTEMAP\_IPC-2-WRONGREQUEST SEM2-140  
 %RPA-3-FLEXIBLE SEM2-140  
 %RPA-3-NO\_CAS\_ENTRY SEM2-140  
 %RPA-3-UNKNOWN\_MSG SEM2-140  
 %RPC-2-APPNOTREG SEM2-141  
 %RPC-4-BADID SEM2-141  
 %RPC-4-DUPREG SEM2-141  
 %RPC-2-FAILED SEM2-141  
 %RPC-2-NOMEM SEM2-142  
 %RPC-2-NOSUCH SEM2-142  
 %RPC-2-NOTREADY SEM2-142  
 %RPC-4-TOOMANY SEM2-142  
 %RPM-4-COOKIE SEM2-143  
 %RPM-4-NOCPUVER SEM2-143  
 %RPM-3-NOMAC SEM2-143  
 %RPM-4-PCIVALID SEM2-143  
 %RP\_MLP-4-MISCONFIGLINK SEM2-144  
 %RP\_MLP-4-NODISTMLP SEM2-144  
 %RP\_MLP-4-PANOTSUPPORTED SEM2-144  
 %RPM\_VIRTUAL\_PORT-3-CLRALLCNF\_DELETE\_FILE SEM2-144  
 %RPM\_VIRTUAL\_PORT-3-CONNDEL SEM2-145  
 %RPM\_VIRTUAL\_PORT-3-IPCERR SEM2-145  
 %RPM\_VIRTUAL\_PORT-3-IPCPAK SEM2-145  
 %RPM\_VIRTUAL\_PORT-3-IPCSIZE SEM2-145  
 %RPM\_VIRTUAL\_PORT-3-RPCREQERR SEM2-145  
 %RPM\_VIRTUAL\_PORT-3-VRTLERR SEM2-146  
 %RPS-3-DCOUTPUTVOLTFAIL SEM2-146  
 %RPS-3-DCOUTPUTVOLTOK SEM2-146  
 %RPS-3-FANFAIL SEM2-146  
 %RPS-3-FANOK SEM2-146  
 %RPS-3-INPUTVOLTFAIL SEM2-147  
 %RPS-3-INPUTVOLTOK SEM2-147  
 %RPS-3-MULTFAIL SEM2-147  
 %RPS-3-OVERTEMP\_OK SEM2-147  
 %RPS-3-OVERVOLT SEM2-148  
 %RPS-3-RPSOK SEM2-148  
 %RPS-3-THERMAL SEM2-148  
 %RPS-3-THERMOK SEM2-148  
 %RPS-3-VOLTOK SEM2-148  
 %RSP-3-ACCERROR SEM2-149  
 %RSP-3-BADBUFHDR SEM2-149  
 %RSP-2-BADCACHE SEM2-149  
 %RSP-3-BADHWREV SEM2-149  
 %RSP-3-BADTURBOIPCMSG SEM2-150  
 %RSP-4-COOKIE SEM2-150  
 %RSP-3-ERROR SEM2-150  
 %RSP-3-FOREVER SEM2-150  
 %RSP-4-HSA\_MEM SEM2-150  
 %RSP-4-HSA\_MINMEM SEM2-151  
 %RSP-3-IDPROM SEM2-151  
 %RSP-3-INVQPTR SEM2-151  
 %RSP-3-INVRTN SEM2-151  
 %RSP-3-INVRTNBCASTID SEM2-151  
 %RSP-3-IPC SEM2-152  
 %RSP-3-IP\_PANIC SEM2-152  
 %RSP-3-LOVEGIANT SEM2-152  
 %RSP-3-LOVENOTE SEM2-152

%RSP-3-MSDOG SEM2-152  
%RSP-3-MSFIX SEM2-153  
%RSP-3-MSVERS SEM2-153  
%RSP-3-NOIDB SEM2-154  
%RSP-3-NOMAC SEM2-154  
%RSP-2-NOMEMORY SEM2-154  
%RSP-3-NORESTART SEM2-154  
%RSP-3-NOSTART SEM2-154  
%RSP-2-QADIAG SEM2-155  
%RSP-2-QAERROR SEM2-155  
%RSP-3-RESTART SEM2-155  
%RSP-4-RSPDRAM SEM2-155  
%RSP-3-SLAVECHANGE SEM2-156  
%RSP-3-SLAVECOPYFAILED SEM2-156  
%RSP-3-SLAVEMASTER SEM2-156  
%RSP-4-SLAVENOTUPDATED SEM2-157  
%RSP-3-SLAVE\_NVRAM\_BUSY SEM2-157  
%RSP-5-SLAVEUP SEM2-157  
%RSP-2-STALL SEM2-157  
%RSP-3-XBUFHDR SEM2-157  
%RSRB-4-BADLEN SEM2-158  
%RSRB-4-BADLENIP SEM2-158  
%RSRB-3-BADVERSIONFST SEM2-158  
%RSRB-3-BADVERSIONIF SEM2-158  
%RSRB-3-BADVERSIONTCP SEM2-158  
%RSRB-4-BADVRE SEM2-159  
%RSRB-4-CONIPST SEM2-159  
%RSRB-4-CONNILLSTATE SEM2-159  
%RSRB-4-CONNSTAT SEM2-159  
%RSRB-3-FSTERR SEM2-159  
%RSRB-3-HDRNOVRP SEM2-160  
%RSRB-4-HDRRECV SEM2-160  
%RSRB-3-HDRVRP SEM2-160  
%RSRB-3-IFERR SEM2-160  
%RSRB-4-ILLPEER SEM2-160  
%RSRB-4-LOCAL SEM2-161  
%RSRB-3-NOMEMORY SEM2-161  
%RSRB-3-NOTREM SEM2-161  
%RSRB-4-OPTNULL SEM2-161  
%RSRB-4-PEERSTAT SEM2-161  
%RSRB-4-RNGXFAIL SEM2-162  
%RSRB-3-SENDPUNTFST SEM2-162  
%RSRB-3-SENDPUNTIF SEM2-162  
%RS\_TDM-3-TDM\_BACKPLANE\_CLASH SEM2-162  
%RS\_TDM-3-TDM\_CONFLICT SEM2-162  
%RS\_TDM-3-TDM\_EXTEND\_CLASH SEM2-163  
%RS\_TDM-3-TDM\_LEG\_CLASH SEM2-163  
%RS\_TDM-3-TDM\_NOT\_SPLIT\_PAIR SEM2-163  
%RS\_TDM-3-TDM\_REDUCED\_TDM\_SPLIT SEM2-163  
%RS\_TDM-3-TDM\_UNKNOWN\_TS\_STATE SEM2-163  
%RTT-3-BadLoc SEM2-164  
%RTT-3-BufferInitFailed SEM2-164  
%RTT-3-GlobalInitFailed SEM2-164  
%RTT-3-MissingEchoStruct SEM2-164  
%RTT-3-MissingInit SEM2-165  
%RTT-3-SemaphoreInitFailed SEM2-165  
%RUDP-3-INIT SEM2-165  
%RUDP-4-LINK SEM2-165  
%RUDP-4-NOBUF SEM2-165  
%S4T68360-1-DWNLDCKSM SEM2-166  
%S4T68360-1-DWNLDFAIL SEM2-166  
%S4T68360-1-INITFAIL SEM2-166  
%S4T68360-3-MBXREAD SEM2-166  
%S4T68360-1-NOTCMPLT SEM2-167  
%S4T68360-1-NOTREADY SEM2-167  
%S4T68360-3-NOTS4T68360 SEM2-167  
%S4T68360-3-OWNERR SEM2-167  
%S4T68360-3-PANIC SEM2-167  
%S4T68360-1-RESTART SEM2-168  
%S4T68360-5-RINGSIZE SEM2-168  
%S4T68360-1-STARTFAIL SEM2-168  
%S4T68360-1-STOPFAIL SEM2-168  
%SARMGR-1-ANALYZE1575FAILED SEM2-168  
%SARMGR-3-NOTNRPSARMGRDEV SEM2-169  
%SCCP-1-ALERT SEM2-169  
%SCCP-2-CRITICAL SEM2-169  
%SCCP-3-ERROR SEM2-169  
%SCCP-6-INFO SEM2-169  
%SCCP-5-NOTICE SEM2-170  
%SCCP-0-PANIC SEM2-170  
%SCCP-4-WARNING SEM2-170  
%SCHED-2-ATTRCMD SEM2-170  
%SCHED-2-ATTRVALUE SEM2-170  
%SCHED-3-CORRUPT SEM2-171  
%SCHED-2-EDISMSCRIT SEM2-171  
%SCHED-3-INTSETWAKEUP SEM2-171  
%SCHED-3-LOSTWAKEUP SEM2-171  
%SCHED-2-MESSAGE SEM2-172

%SCHED-2-NOATTR SEM2-172  
 %SCHED-2-NOTWATCHTIMER SEM2-172  
 %SCHED-3-PAGEZERO SEM2-172  
 %SCHED-3-PRIORITY SEM2-173  
 %SCHED-2-QUEUEEMPTY SEM2-173  
 %SCHED-2-SEMNOTLOCKED SEM2-173  
 %SCHED-2-SEMUNLOCK SEM2-173  
 %SCHED-2-SETHIGHORCRIT SEM2-174  
 %SCHED-3-STACKSIZE SEM2-174  
 %SCHED-3-STILLWATCHING SEM2-174  
 %SCHED-3-STILLWATCHINGT SEM2-174  
 %SCHED-3-STUCKMTMR SEM2-175  
 %SCHED-3-STUCKTMR SEM2-175  
 %SCHED-3-THRASHING SEM2-175  
 %SCHED-3-UNEXPECTEDEVENT SEM2-176  
 %SCHED-3-UNEXPECTEDMESSAGE SEM2-176  
 %SCHED-3-UNEXPECTEDQUEUE SEM2-176  
 %SCHED-3-UNEXPECTEDTIMER SEM2-177  
 %SCHED-2-WATCH SEM2-177  
 %SCP-3-BADVLAN SEM2-177  
 %SCP-4-DACK\_TIMEOUT\_MSG SEM2-177  
 %SCP-4-GET\_PAK\_MSG SEM2-178  
 %SCP-2-NOMEM SEM2-178  
 %SCP-3-NOPROC SEM2-178  
 %SCP-3-NOQUEUE SEM2-178  
 %SCP-2-NOTREG SEM2-178  
 %SCP-3-PROCEXIT SEM2-179  
 %SCP-2-TOO\_MANY\_SAP SEM2-179  
 %SCP-3-UNKMSG SEM2-179  
 %SDLC-4-BADFRAME SEM2-179  
 %SDLC-3-CONFIGERR SEM2-180  
 %SDLC-4-CTRLBAD SEM2-180  
 %SDLC-3-DLU\_ERROR SEM2-180  
 %SDLC-4-DROPPED SEM2-180  
 %SDLC-4-FRAMEERR SEM2-180  
 %SDLC-2-ILLEGSTATE SEM2-181  
 %SDLC-4-INFOBAD SEM2-181  
 %SDLC-4-INVLDGRPCFG SEM2-181  
 %SDLC-5-INVLDGRPPOLL SEM2-181  
 %SDLC-4-INVNR SEM2-181  
 %SDLC-4-NITOOBIG SEM2-182  
 %SDLC-3-NOINPIDB SEM2-182  
 %SDLC-2-NOMEMORY SEM2-182  
 %SDLC-2-NOPOINTER SEM2-182  
 %SDLC-4-NOUA SEM2-182  
 %SDLC-3-NULLPAK SEM2-183  
 %SDLC-4-SDLC\_ERR SEM2-183  
 %SDLC-6-XID\_DISPLAY SEM2-183  
 %SDLC-6-XID\_FORMAT SEM2-183  
 %SDLC-4-XID\_NOMATCH SEM2-184  
 %SDLLC-5-ACT\_LINK SEM2-185  
 %SDLLC-5-DACT\_LINK SEM2-185  
 %SEC-6-IPACCESSLOGDP SEM2-185  
 %SEC-6-IPACCESSLOGNP SEM2-185  
 %SEC-6-IPACCESSLOGP SEM2-186  
 %SEC-6-IPACCESSLOGRP SEM2-186  
 %SEC-6-IPACCESSLOGS SEM2-186  
 %SEC-3-NOMAX SEM2-186  
 %SEC-2-NOOPT SEM2-186  
 %SEC-2-NOTSEC SEM2-187  
 %SEC-2-SECINS SEM2-187  
 %SEC-4-TOOMANY SEM2-187  
 %SERVICE\_MODULE-4-ACCESSERROR SEM2-187  
 %SERVICE\_MODULE-4-ALARMFAILURE SEM2-188  
 %SERVICE\_MODULE-4-BADTYPE SEM2-188  
 %SERVICE\_MODULE-4-COMMANDFAILED SEM2-188  
 %SERVICE\_MODULE-0-INITFAILURE SEM2-188  
 %SERVICE\_MODULE-0-INITWICFAILURE SEM2-189  
 %SERVICE\_MODULE-4-INTERBYTETIMEOUT SEM2-189  
 %SERVICE\_MODULE-3-LOOPDOWNFAILED SEM2-189  
 %SERVICE\_MODULE-5-LOOPDOWNREMOTE SEM2-189  
 %SERVICE\_MODULE-5-LOOPUPFAILED SEM2-189  
 %SERVICE\_MODULE-5-LOOPUPREMOTE SEM2-190  
 %SERVICE\_MODULE-4-NOTREADY SEM2-190  
 %SERVICE\_MODULE-4-OLDIMAGE SEM2-190  
 %SERVICE\_MODULE-4-REPEATEDRESET SEM2-190  
 %SERVICE\_MODULE-4-REQUESTOVERLOAD SEM2-191  
 %SERVICE\_MODULE-5-RESET SEM2-191  
 %SERVICE\_MODULE-4-RESETFAILURE SEM2-191  
 %SERVICE\_MODULE-4-UNKNOWNALARM SEM2-191  
 %SERVICE\_MODULE-4-WICNOTREADY SEM2-192  
 %SGBP-7-ACTIVE SEM2-192  
 %SGBP-5-ARRIVING SEM2-192  
 %SGBP-1-AUTHFAILED SEM2-192  
 %SGBP-7-AUTHOK SEM2-193  
 %SGBP-7-CANCEL SEM2-193  
 %SGBP-7-CHALLENGE SEM2-193  
 %SGBP-7-CHALLENGED SEM2-193

%SGBP-7-CLOSE SEM2-193  
%SGBP-1-DIFFERENT SEM2-194  
%SGBP-7-DONE SEM2-194  
%SGBP-7-DUPL SEM2-194  
%SGBP-1-DUPLICATE SEM2-194  
%SGBP-7-EQUAL SEM2-194  
%SGBP-7-HANGUP SEM2-195  
%SGBP-3-INVALID SEM2-195  
%SGBP-3-INVALIDADDR SEM2-195  
%SGBP-3-INVALIDDB SEM2-195  
%SGBP-3-INVFIELD SEM2-195  
%SGBP-7-KEEPALIVE SEM2-196  
%SGBP-7-KEEPALIVE\_TIMEOUT SEM2-196  
%SGBP-5-LEAVING SEM2-196  
%SGBP-1-MISSCONF SEM2-196  
%SGBP-7-MQ SEM2-196  
%SGBP-7-MQB SEM2-197  
%SGBP-7-NEWL SEM2-197  
%SGBP-7-NEWP SEM2-197  
%SGBP-7-NORESP SEM2-197  
%SGBP-7-PB SEM2-197  
%SGBP-3-PEERERROR SEM2-198  
%SGBP-7-RCVD SEM2-198  
%SGBP-7-RCVINFO SEM2-198  
%SGBP-7-RESPONSE SEM2-198  
%SGBP-7-RESPONSED SEM2-198  
%SGBP-7-SENDAUTHOK SEM2-199  
%SGBP-7-SENDINFO SEM2-199  
%SGBP-7-SENT SEM2-199  
%SGBP-5-SHUTDOWN SEM2-199  
%SGBP-5-STARTUP SEM2-199  
%SGBP-3-TIMEOUT SEM2-200  
%SGBP-3-UNEXP SEM2-200  
%SGBP-3-UNKNOWN SEM2-200  
%SGBP-3-UNKNOWNEVENT SEM2-200  
%SGBP-1-UNKNOWNHELLO SEM2-201  
%SGBP-3-UNKNOWNPEER SEM2-201  
%SGCP-2-INTERNAL\_CRITICAL SEM2-201  
%SGCP-3-INTERNAL\_ERROR SEM2-202  
%SGCP-4-INTERNAL\_WARNING SEM2-202  
%SGCP\_APP-6-CALL\_REC\_DATABASE\_FAILED SEM2-202  
%SGCP\_APP-6-DIGIT\_MAP\_DATABASE\_FAILED SEM2-202  
%SGCP\_APP-6-DNS\_QUEUE\_FAILED SEM2-203  
%SGCP\_APP-6-PROCESS\_CREATION\_FAILED SEM2-203  
%SGCP\_APP-6-SOCKET\_OPEN\_FAILED SEM2-203  
%SHELF-5-AUTH\_FAILED SEM2-203  
%SHELF-3-DISCOVER\_SOCKET\_OPEN SEM2-203  
%SHELF-6-HELLO\_PROCESS\_START SEM2-204  
%SHELF-6-HELLO\_PROCESS\_STOP SEM2-204  
%SHELF-6-SYSCTLR\_ESTABLISHED SEM2-204  
%SIGSM-1-BAD\_VAR\_ERR SEM2-204  
%SIGSM-1-EVENT\_ERR SEM2-204  
%SIGSM-1-NO\_TEMPLATE\_ERR SEM2-205  
%SLB-4-UNEXPECTED SEM2-205  
%SLB-4-WARNING SEM2-205  
%SLB\_DFP-4-BAD\_LEN SEM2-205  
%SLB\_DFP-4-BAD\_MSG SEM2-206  
%SLB\_DFP-4-BAD\_SEND SEM2-206  
%SLB\_DFP-4-BIG\_MSG SEM2-206  
%SLB\_DFP-4-BIG\_VEC SEM2-206  
%SLB\_DFP-4-CON\_FAIL SEM2-206  
%SLB\_DFP-4-KEEP\_ALV SEM2-207  
%SLB\_DFP-4-NO\_PARSE SEM2-207  
%SLB\_DFP-4-READ\_ERR SEM2-207  
%SLB\_DFP-4-SOCK\_ERR SEM2-207  
%SLB\_DFP-4-SOCK\_OPN SEM2-208  
%SLB\_DFP-4-UKN\_CON SEM2-208  
%SLB\_DFP-4-UNEXPECTED SEM2-208  
%SLB\_DFP-4-UNK\_TYPE SEM2-208  
%SLIP-2-BADQUOTE SEM2-208  
%SLIP-2-BADSTATE SEM2-209  
%SLOTDUMP-3-CORE\_DUMP\_ERROR SEM2-209  
%SM-4-BADEVENT SEM2-209  
%SM-4-INIT SEM2-210  
%SM-4-PERSIST SEM2-210  
%SM-4-STOPPED SEM2-210  
%SMF-4-INVALID\_ACTION SEM2-210  
%SMRP-2-ASSERTFAILED SEM2-211  
%SMRP-7-DEBUGMSG SEM2-211  
%SMRP-5-NEIGHBORDOWN SEM2-211  
%SMRP-6-NEIGHBORUP SEM2-211  
%SMRP-3-NOFDDICOMPAT SEM2-211  
%SMRP-5-PORTDOWN SEM2-212  
%SMRP-6-PORTUP SEM2-212  
%SNAPSHOT-2-BADSTATE SEM2-212  
%SNAPSHOT-2-TOOMANYDIALERS SEM2-212  
%SNASW-4-APPN\_LOG\_0 SEM2-213

%SNASW-3-APPN\_LOG\_1 SEM2-213  
 %SNASW-4-APPN\_LOG\_2 SEM2-213  
 %SNASW-3-ASM\_LOG\_0 SEM2-213  
 %SNASW-3-ASM\_LOG\_2 SEM2-214  
 %SNASW-3-ASM\_LOG\_3 SEM2-214  
 %SNASW-3-ASM\_LOG\_4 SEM2-214  
 %SNASW-3-ASM\_LOG\_5 SEM2-214  
 %SNASW-3-ASM\_LOG\_6 SEM2-215  
 %SNASW-3-ASM\_LOG\_11 SEM2-215  
 %SNASW-3-ASM\_LOG\_12 SEM2-215  
 %SNASW-4-ASM\_LOG\_15 SEM2-215  
 %SNASW-4-ASM\_LOG\_18 SEM2-216  
 %SNASW-3-ASM\_LOG\_19 SEM2-216  
 %SNASW-3-ASM\_LOG\_22 SEM2-216  
 %SNASW-3-ASM\_LOG\_24 SEM2-216  
 %SNASW-4-ASM\_LOG\_25 SEM2-217  
 %SNASW-4-ASM\_LOG\_26 SEM2-217  
 %SNASW-3-ASM\_LOG\_27 SEM2-217  
 %SNASW-3-ASM\_LOG\_28 SEM2-218  
 %SNASW-4-ASM\_LOG\_29 SEM2-218  
 %SNASW-3-BAD\_MSG\_NAME SEM2-218  
 %SNASW-4-CH2\_LOG\_0 SEM2-218  
 %SNASW-4-CH2\_LOG\_1 SEM2-218  
 %SNASW-4-CH2\_LOG\_2 SEM2-219  
 %SNASW-4-CH\_LOG\_0 SEM2-219  
 %SNASW-4-CH\_LOG\_1 SEM2-219  
 %SNASW-4-CH\_LOG\_2 SEM2-220  
 %SNASW-4-CH\_LOG\_3 SEM2-220  
 %SNASW-4-CH\_LOG\_4 SEM2-220  
 %SNASW-4-CH\_LOG\_5 SEM2-220  
 %SNASW-4-CH\_LOG\_6 SEM2-220  
 %SNASW-4-CH\_LOG\_8 SEM2-221  
 %SNASW-4-CH\_LOG\_9 SEM2-221  
 %SNASW-3-CLSIBadPrimitive SEM2-221  
 %SNASW-3-CLSIBadReturnCode SEM2-221  
 %SNASW-3-CLSIFailure SEM2-221  
 %SNASW-4-CPUUsage SEM2-222  
 %SNASW-3-CS\_LOG\_0 SEM2-222  
 %SNASW-3-CS\_LOG\_1 SEM2-222  
 %SNASW-3-CS\_LOG\_2 SEM2-222  
 %SNASW-3-CS\_LOG\_3 SEM2-223  
 %SNASW-3-CS\_LOG\_4 SEM2-223  
 %SNASW-3-CS\_LOG\_5 SEM2-223  
 %SNASW-3-CS\_LOG\_6 SEM2-223  
 %SNASW-3-CS\_LOG\_7 SEM2-225  
 %SNASW-3-CS\_LOG\_8 SEM2-226  
 %SNASW-3-CS\_LOG\_9 SEM2-226  
 %SNASW-3-CS\_LOG\_10 SEM2-226  
 %SNASW-3-CS\_LOG\_11 SEM2-227  
 %SNASW-4-CS\_LOG\_12 SEM2-227  
 %SNASW-3-CS\_LOG\_13 SEM2-227  
 %SNASW-4-CS\_LOG\_14 SEM2-227  
 %SNASW-4-CS\_LOG\_15 SEM2-228  
 %SNASW-3-CS\_LOG\_17 SEM2-228  
 %SNASW-4-CS\_LOG\_19 SEM2-228  
 %SNASW-3-CS\_LOG\_22 SEM2-228  
 %SNASW-3-CS\_LOG\_24 SEM2-228  
 %SNASW-4-CS\_LOG\_25 SEM2-229  
 %SNASW-4-CS\_LOG\_26 SEM2-229  
 %SNASW-4-CS\_LOG\_27 SEM2-229  
 %SNASW-4-CS\_LOG\_28 SEM2-229  
 %SNASW-4-CS\_LOG\_29 SEM2-230  
 %SNASW-3-CS\_LOG\_30 SEM2-230  
 %SNASW-3-CS\_LOG\_31 SEM2-230  
 %SNASW-3-CS\_LOG\_32 SEM2-230  
 %SNASW-3-CS\_LOG\_33 SEM2-231  
 %SNASW-3-CS\_LOG\_34 SEM2-231  
 %SNASW-4-CS\_LOG\_35 SEM2-231  
 %SNASW-4-CS\_LOG\_36 SEM2-231  
 %SNASW-4-CS\_LOG\_37 SEM2-232  
 %SNASW-4-CS\_LOG\_38 SEM2-232  
 %SNASW-6-CS\_LOG\_39 SEM2-232  
 %SNASW-6-CS\_LOG\_40 SEM2-232  
 %SNASW-6-CS\_LOG\_41 SEM2-232  
 %SNASW-6-CS\_LOG\_42 SEM2-233  
 %SNASW-4-CS\_LOG\_43 SEM2-233  
 %SNASW-6-CS\_LOG\_44 SEM2-233  
 %SNASW-3-CS\_LOG\_51 SEM2-233  
 %SNASW-4-CS\_LOG\_52 SEM2-233  
 %SNASW-3-CS\_LOG\_54 SEM2-234  
 %SNASW-6-CS\_LOG\_55 SEM2-234  
 %SNASW-6-CS\_LOG\_56 SEM2-234  
 %SNASW-6-CS\_LOG\_57 SEM2-234  
 %SNASW-6-CS\_LOG\_58 SEM2-234  
 %SNASW-6-CS\_LOG\_59 SEM2-234  
 %SNASW-6-CS\_LOG\_60 SEM2-235  
 %SNASW-4-CS\_LOG\_61 SEM2-235  
 %SNASW-3-CS\_LOG\_62 SEM2-235

%SNASW-3-CS\_LOG\_63 SEM2-235  
%SNASW-3-CS\_LOG\_64 SEM2-235  
%SNASW-3-CS\_LOG\_65 SEM2-236  
%SNASW-6-CS\_LOG\_66 SEM2-236  
%SNASW-3-CS\_LOG\_67 SEM2-236  
%SNASW-3-CS\_LOG\_68 SEM2-236  
%SNASW-3-CS\_LOG\_69 SEM2-237  
%SNASW-6-CS2\_LOG\_0 SEM2-237  
%SNASW-4-CS2\_LOG\_2 SEM2-237  
%SNASW-4-CS2\_LOG\_3 SEM2-237  
%SNASW-4-CS2\_LOG\_4 SEM2-238  
%SNASW-4-CS2\_LOG\_5 SEM2-238  
%SNASW-3-CS2\_LOG\_9 SEM2-238  
%SNASW-4-CS2\_LOG\_10 SEM2-238  
%SNASW-4-CS2\_LOG\_11 SEM2-239  
%SNASW-4-CS2\_LOG\_12 SEM2-239  
%SNASW-4-CS2\_LOG\_25 SEM2-239  
%SNASW-4-CS2\_LOG\_26 SEM2-239  
%SNASW-4-CS2\_LOG\_27 SEM2-240  
%SNASW-4-CS2\_LOG\_28 SEM2-240  
%SNASW-4-CS2\_LOG\_29 SEM2-240  
%SNASW-4-CS2\_LOG\_30 SEM2-240  
%SNASW-3-DLCBadMessage SEM2-241  
%SNASW-3-DLCFailure SEM2-241  
%SNASW-3-DLCInvalidFsmState SEM2-241  
%SNASW-3-DLCPortFailure SEM2-241  
%SNASW-4-DLUR\_LOG\_1 SEM2-241  
%SNASW-3-DLUR\_LOG\_2 SEM2-242  
%SNASW-4-DLUR\_LOG\_5 SEM2-242  
%SNASW-4-DLUR\_LOG\_8 SEM2-242  
%SNASW-4-DLUR\_LOG\_9 SEM2-242  
%SNASW-4-DLUR\_LOG\_10 SEM2-242  
%SNASW-3-DLUR\_LOG\_11 SEM2-243  
%SNASW-6-DLUR\_LOG\_12 SEM2-243  
%SNASW-6-DLUR\_LOG\_13 SEM2-243  
%SNASW-4-DLUR\_LOG\_14 SEM2-243  
%SNASW-4-DLUR\_LOG\_15 SEM2-244  
%SNASW-4-DLUR\_LOG\_16 SEM2-244  
%SNASW-4-DLUR\_LOG\_17 SEM2-244  
%SNASW-4-DLUR\_LOG\_18 SEM2-244  
%SNASW-6-DLUR\_LOG\_19 SEM2-244  
%SNASW-4-DLUR\_LOG\_20 SEM2-245  
%SNASW-4-DLUR\_LOG\_21 SEM2-245  
%SNASW-4-DS2\_LOG\_0 SEM2-245  
%SNASW-3-DS\_LOG\_1 SEM2-245  
%SNASW-4-DS\_LOG\_2 SEM2-246  
%SNASW-3-DS\_LOG\_3 SEM2-246  
%SNASW-3-DS\_LOG\_4 SEM2-246  
%SNASW-4-DS\_LOG\_5 SEM2-247  
%SNASW-3-DS\_LOG\_9 SEM2-247  
%SNASW-4-DS\_LOG\_10 SEM2-247  
%SNASW-3-DS\_LOG\_11 SEM2-247  
%SNASW-3-DS\_LOG\_12 SEM2-247  
%SNASW-3-DS\_LOG\_13 SEM2-248  
%SNASW-3-DS\_LOG\_14 SEM2-248  
%SNASW-3-DS\_LOG\_15 SEM2-248  
%SNASW-3-DS\_LOG\_17 SEM2-248  
%SNASW-4-DS\_LOG\_18 SEM2-249  
%SNASW-3-DS\_LOG\_21 SEM2-249  
%SNASW-4-DS\_LOG\_22 SEM2-249  
%SNASW-3-DS\_LOG\_23 SEM2-249  
%SNASW-3-DS\_LOG\_24 SEM2-250  
%SNASW-3-DS\_LOG\_26 SEM2-250  
%SNASW-3-DS\_LOG\_27 SEM2-250  
%SNASW-3-DS\_LOG\_28 SEM2-250  
%SNASW-3-DS\_LOG\_29 SEM2-251  
%SNASW-3-DS\_LOG\_30 SEM2-251  
%SNASW-3-DS\_LOG\_31 SEM2-251  
%SNASW-3-DS\_LOG\_32 SEM2-252  
%SNASW-3-DS\_LOG\_33 SEM2-252  
%SNASW-4-DS\_LOG\_34 SEM2-252  
%SNASW-4-DS\_LOG\_35 SEM2-252  
%SNASW-4-DS\_LOG\_36 SEM2-253  
%SNASW-4-DS\_LOG\_37 SEM2-253  
%SNASW-6-DS\_LOG\_38 SEM2-253  
%SNASW-3-DS\_LOG\_40 SEM2-253  
%SNASW-3-DS\_LOG\_41 SEM2-253  
%SNASW-3-DS\_LOG\_42 SEM2-254  
%SNASW-6-DS\_LOG\_43 SEM2-254  
%SNASW-4-DS\_LOG\_44 SEM2-254  
%SNASW-3-DS2\_LOG\_1 SEM2-254  
%SNASW-4-DS2\_LOG\_2 SEM2-254  
%SNASW-4-DS2\_LOG\_3 SEM2-255  
%SNASW-4-DS2\_LOG\_4 SEM2-255  
%SNASW-3-DS2\_LOG\_5 SEM2-255  
%SNASW-3-EVENT SEM2-255  
%SNASW-4-HPR\_LOG\_0 SEM2-256  
%SNASW-4-HPR\_LOG\_1 SEM2-256

%SNASW-3-HPR\_LOG\_2 SEM2-256  
 %SNASW-4-HPR\_LOG\_3 SEM2-256  
 %SNASW-4-HPR\_LOG\_4 SEM2-256  
 %SNASW-4-HPR\_LOG\_5 SEM2-257  
 %SNASW-4-HPR\_LOG\_6 SEM2-257  
 %SNASW-4-HPR\_LOG\_8 SEM2-257  
 %SNASW-4-HPR\_LOG\_9 SEM2-257  
 %SNASW-4-HPR\_LOG\_10 SEM2-258  
 %SNASW-4-HPR\_LOG\_11 SEM2-258  
 %SNASW-4-HPR\_LOG\_12 SEM2-258  
 %SNASW-4-HPR\_LOG\_13 SEM2-259  
 %SNASW-4-HPR\_LOG\_14 SEM2-259  
 %SNASW-4-HPR\_LOG\_15 SEM2-259  
 %SNASW-4-HPR\_LOG\_16 SEM2-259  
 %SNASW-4-HPR\_LOG\_17 SEM2-260  
 %SNASW-4-HPR\_LOG\_18 SEM2-260  
 %SNASW-4-HS\_LOG\_0 SEM2-260  
 %SNASW-4-HS\_LOG\_1 SEM2-260  
 %SNASW-4-HS\_LOG\_3 SEM2-261  
 %SNASW-4-HS\_LOG\_4 SEM2-262  
 %SNASW-4-HS\_LOG\_5 SEM2-262  
 %SNASW-4-HS\_LOG\_6 SEM2-262  
 %SNASW-4-HS\_LOG\_7 SEM2-263  
 %SNASW-3-HS\_LOG\_8 SEM2-263  
 %SNASW-4-HS\_LOG\_9 SEM2-263  
 %SNASW-4-LDLC\_CTRL\_LOG\_0 SEM2-264  
 %SNASW-4-LDLC\_CTRL\_LOG\_1 SEM2-264  
 %SNASW-4-LDLC\_CTRL\_LOG\_2 SEM2-264  
 %SNASW-4-LDLC\_DATA\_LOG\_0 SEM2-264  
 %SNASW-4-LDLC\_DATA\_LOG\_1 SEM2-265  
 %SNASW-4-LDLC\_DATA\_LOG\_2 SEM2-265  
 %SNASW-6-LDLC\_DEBUG\_LOG\_0 SEM2-265  
 %SNASW-4-LDLC\_IP\_LOG\_0 SEM2-265  
 %SNASW-4-LDLC\_IP\_LOG\_1 SEM2-265  
 %SNASW-4-LDLC\_IP\_LOG\_2 SEM2-266  
 %SNASW-4-LDLC\_IP\_LOG\_3 SEM2-266  
 %SNASW-4-LDLC\_IP\_LOG\_4 SEM2-266  
 %SNASW-6-LDLC\_IP\_LOG\_9 SEM2-266  
 %SNASW-4-LDLC\_IP\_LOG\_10 SEM2-267  
 %SNASW-4-LDLC\_IP\_LOG\_11 SEM2-267  
 %SNASW-3-LDLC\_IP\_LOG\_12 SEM2-267  
 %SNASW-6-LM\_LOG\_0 SEM2-267  
 %SNASW-6-LM\_LOG\_1 SEM2-268  
 %SNASW-6-LM\_LOG\_2 SEM2-268  
 %SNASW-6-LM\_LOG\_3 SEM2-268  
 %SNASW-3-LM\_LOG\_4 SEM2-268  
 %SNASW-3-LM\_LOG\_5 SEM2-268  
 %SNASW-4-LM\_LOG\_6 SEM2-269  
 %SNASW-4-LM\_LOG\_7 SEM2-269  
 %SNASW-3-LM\_LOG\_12 SEM2-269  
 %SNASW-3-LM\_LOG\_13 SEM2-269  
 %SNASW-3-LM\_LOG\_14 SEM2-269  
 %SNASW-3-LM\_LOG\_15 SEM2-270  
 %SNASW-3-LM\_LOG\_16 SEM2-271  
 %SNASW-3-LM\_LOG\_17 SEM2-271  
 %SNASW-4-LM\_LOG\_18 SEM2-271  
 %SNASW-3-LM\_LOG\_19 SEM2-272  
 %SNASW-4-LM2\_LOG\_0 SEM2-272  
 %SNASW-4-LM2\_LOG\_1 SEM2-272  
 %SNASW-3-MIBQueryFailure SEM2-273  
 %SNASW-3-MIBRegisterFailure SEM2-273  
 %SNASW-3-MIBTrapFailure SEM2-273  
 %SNASW-4-MS\_LOG\_3 SEM2-274  
 %SNASW-4-MS\_LOG\_5 SEM2-274  
 %SNASW-4-MS\_LOG\_6 SEM2-274  
 %SNASW-6-MS\_LOG\_7 SEM2-274  
 %SNASW-4-MS\_LOG\_8 SEM2-274  
 %SNASW-4-MS\_LOG\_9 SEM2-275  
 %SNASW-4-MS\_LOG\_10 SEM2-275  
 %SNASW-4-MS\_LOG\_12 SEM2-275  
 %SNASW-4-MS\_LOG\_13 SEM2-275  
 %SNASW-4-MS\_LOG\_14 SEM2-276  
 %SNASW-4-MS\_LOG\_15 SEM2-276  
 %SNASW-4-MS\_LOG\_16 SEM2-276  
 %SNASW-4-MS\_LOG\_17 SEM2-276  
 %SNASW-4-MS\_LOG\_18 SEM2-277  
 %SNASW-3-MS\_LOG\_22 SEM2-277  
 %SNASW-4-MS\_LOG\_23 SEM2-277  
 %SNASW-4-MS\_LOG\_24 SEM2-277  
 %SNASW-4-MS\_LOG\_27 SEM2-278  
 %SNASW-4-MS\_LOG\_28 SEM2-278  
 %SNASW-4-MS\_LOG\_29 SEM2-278  
 %SNASW-4-MS\_LOG\_31 SEM2-278  
 %SNASW-4-MS\_LOG\_32 SEM2-279  
 %SNASW-4-MS\_LOG\_33 SEM2-279  
 %SNASW-4-MS\_LOG\_34 SEM2-279  
 %SNASW-4-MS\_LOG\_36 SEM2-279  
 %SNASW-4-MS\_LOG\_37 SEM2-280

%SNASW-3-NOF\_LOG\_10 SEM2-280  
%SNASW-3-NOF\_LOG\_11 SEM2-280  
%SNASW-4-NOF\_LOG\_15 SEM2-280  
%SNASW-6-NOF\_LOG\_2 SEM2-281  
%SNASW-3-NOF\_LOG\_3 SEM2-281  
%SNASW-6-NOF\_LOG\_4 SEM2-281  
%SNASW-3-NOF\_LOG\_7 SEM2-281  
%SNASW-4-PC\_LOG\_0 SEM2-281  
%SNASW-3-PS\_LOG\_1 SEM2-282  
%SNASW-4-PC\_LOG\_4 SEM2-282  
%SNASW-4-PC\_LOG\_5 SEM2-282  
%SNASW-4-PC\_LOG\_9 SEM2-282  
%SNASW-3-PC\_LOG\_10 SEM2-283  
%SNASW-3-PC\_LOG\_11 SEM2-283  
%SNASW-3-PC\_LOG\_12 SEM2-283  
%SNASW-4-PC\_LOG\_14 SEM2-283  
%SNASW-4-PC\_LOG\_15 SEM2-284  
%SNASW-4-PC\_LOG\_16 SEM2-284  
%SNASW-4-PC\_LOG\_17 SEM2-284  
%SNASW-3-PS\_LOG\_3 SEM2-284  
%SNASW-3-PS\_LOG\_4 SEM2-285  
%SNASW-4-PS\_LOG\_5 SEM2-285  
%SNASW-4-PS\_LOG\_7 SEM2-285  
%SNASW-4-PS\_LOG\_8 SEM2-286  
%SNASW-6-PS\_LOG\_9 SEM2-286  
%SNASW-3-PS\_LOG\_10 SEM2-286  
%SNASW-4-PS\_LOG\_11 SEM2-286  
%SNASW-4-PS\_LOG\_12 SEM2-287  
%SNASW-4-PS\_LOG\_13 SEM2-287  
%SNASW-4-PS\_LOG\_14 SEM2-287  
%SNASW-4-PS\_LOG\_15 SEM2-288  
%SNASW-6-PU\_LOG\_0 SEM2-288  
%SNASW-6-PU\_LOG\_1 SEM2-288  
%SNASW-4-PU\_LOG\_2 SEM2-288  
%SNASW-3-RM\_LOG\_0 SEM2-288  
%SNASW-3-RM\_LOG\_3 SEM2-289  
%SNASW-4-RM\_LOG\_13 SEM2-289  
%SNASW-3-RM\_LOG\_14 SEM2-289  
%SNASW-3-RM\_LOG\_15 SEM2-289  
%SNASW-3-RM\_LOG\_22 SEM2-290  
%SNASW-4-RM\_LOG\_23 SEM2-290  
%SNASW-6-RM\_LOG\_27 SEM2-290  
%SNASW-3-RM\_LOG\_37 SEM2-290  
%SNASW-3-RM\_LOG\_42 SEM2-291  
%SNASW-3-RM\_LOG\_43 SEM2-291  
%SNASW-3-RM\_LOG\_44 SEM2-291  
%SNASW-3-RM\_LOG\_45 SEM2-291  
%SNASW-3-RM\_LOG\_46 SEM2-292  
%SNASW-3-RM\_LOG\_47 SEM2-292  
%SNASW-3-RM\_LOG\_48 SEM2-292  
%SNASW-3-RM\_LOG\_49 SEM2-293  
%SNASW-3-RM\_LOG\_50 SEM2-293  
%SNASW-3-RM\_LOG\_51 SEM2-293  
%SNASW-3-RM\_LOG\_52 SEM2-293  
%SNASW-3-RM\_LOG\_53 SEM2-294  
%SNASW-3-RM\_LOG\_54 SEM2-294  
%SNASW-3-RM2\_LOG\_0 SEM2-294  
%SNASW-6-RTP\_LOG\_0 SEM2-294  
%SNASW-6-RTP\_LOG\_1 SEM2-294  
%SNASW-4-RTP\_LOG\_2 SEM2-295  
%SNASW-4-RTP\_LOG\_3 SEM2-295  
%SNASW-4-RTP\_LOG\_4 SEM2-295  
%SNASW-4-RTP\_LOG\_5 SEM2-295  
%SNASW-6-RTP\_LOG\_6 SEM2-295  
%SNASW-4-RTP\_LOG\_7 SEM2-295  
%SNASW-4-RTP\_LOG\_8 SEM2-296  
%SNASW-4-RTP\_LOG\_9 SEM2-296  
%SNASW-4-RTP2\_LOG\_0 SEM2-296  
%SNASW-4-RTP2\_LOG\_1 SEM2-296  
%SNASW-4-SC\_LOG\_1 SEM2-297  
%SNASW-4-SC\_LOG\_2 SEM2-297  
%SNASW-3-SCM\_LOG\_0 SEM2-297  
%SNASW-3-SCM\_LOG\_1 SEM2-298  
%SNASW-3-SCM\_LOG\_3 SEM2-298  
%SNASW-3-SCM\_LOG\_4 SEM2-298  
%SNASW-3-SCM\_LOG\_5 SEM2-298  
%SNASW-3-SCM\_LOG\_6 SEM2-299  
%SNASW-4-SCM\_LOG\_7 SEM2-299  
%SNASW-4-SCM\_LOG\_8 SEM2-299  
%SNASW-6-SCM\_LOG\_9 SEM2-299  
%SNASW-6-SCM\_LOG\_10 SEM2-299  
%SNASW-3-SCM\_LOG\_11 SEM2-300  
%SNASW-3-SCM\_LOG\_12 SEM2-300  
%SNASW-3-SCM\_LOG\_13 SEM2-300  
%SNASW-3-SCM\_LOG\_14 SEM2-301  
%SNASW-3-SCM\_LOG\_15 SEM2-301  
%SNASW-3-SM\_LOG\_0 SEM2-301  
%SNASW-3-SM\_LOG\_1 SEM2-301



%SNASW-3-SM\_LOG\_2 SEM2-302  
 %SNASW-3-SM\_LOG\_5 SEM2-302  
 %SNASW-4-SM\_LOG\_6 SEM2-302  
 %SNASW-3-SM\_LOG\_10 SEM2-302  
 %SNASW-3-SM\_LOG\_11 SEM2-303  
 %SNASW-3-SM\_LOG\_12 SEM2-303  
 %SNASW-4-SM\_LOG\_13 SEM2-303  
 %SNASW-3-SM\_LOG\_14 SEM2-303  
 %SNASW-3-SM\_LOG\_15 SEM2-304  
 %SNASW-3-SM\_LOG\_16 SEM2-304  
 %SNASW-4-SM\_LOG\_18 SEM2-304  
 %SNASW-4-SM\_LOG\_20 SEM2-305  
 %SNASW-4-SM\_LOG\_21 SEM2-305  
 %SNASW-4-SM\_LOG\_30 SEM2-305  
 %SNASW-3-SM\_LOG\_31 SEM2-305  
 %SNASW-4-SM\_LOG\_32 SEM2-306  
 %SNASW-3-SM\_LOG\_33 SEM2-306  
 %SNASW-3-SM\_LOG\_34 SEM2-306  
 %SNASW-3-SM\_LOG\_35 SEM2-306  
 %SNASW-3-SM\_LOG\_36 SEM2-307  
 %SNASW-6-SM\_LOG\_37 SEM2-307  
 %SNASW-6-SM\_LOG\_38 SEM2-307  
 %SNASW-4-SM\_LOG\_39 SEM2-307  
 %SNASW-4-SM\_LOG\_40 SEM2-307  
 %SNASW-3-SM\_LOG\_41 SEM2-308  
 %SNASW-3-SM\_LOG\_42 SEM2-308  
 %SNASW-6-SM\_LOG\_43 SEM2-308  
 %SNASW-6-SM\_LOG\_44 SEM2-308  
 %SNASW-3-SM\_LOG\_45 SEM2-308  
 %SNASW-3-SM\_LOG\_46 SEM2-309  
 %SNASW-3-SM\_LOG\_47 SEM2-309  
 %SNASW-3-SM\_LOG\_48 SEM2-309  
 %SNASW-4-SM\_LOG\_49 SEM2-310  
 %SNASW-4-SM2\_LOG\_0 SEM2-311  
 %SNASW-4-SM2\_LOG\_1 SEM2-311  
 %SNASW-4-SS\_LOG\_4 SEM2-311  
 %SNASW-3-SS\_LOG\_5 SEM2-311  
 %SNASW-3-SS\_LOG\_7 SEM2-312  
 %SNASW-3-SS\_LOG\_8 SEM2-312  
 %SNASW-3-SS\_LOG\_9 SEM2-312  
 %SNASW-6-SS\_LOG\_11 SEM2-313  
 %SNASW-6-SS\_LOG\_12 SEM2-313  
 %SNASW-4-SS\_LOG\_13 SEM2-313  
 %SNASW-3-SS\_LOG\_16 SEM2-313  
 %SNASW-4-SS\_LOG\_17 SEM2-313  
 %SNASW-6-SS\_LOG\_18 SEM2-313  
 %SNASW-4-SS\_LOG\_19 SEM2-314  
 %SNASW-4-TC\_LOG\_0 SEM2-314  
 %SNASW-4-TC\_LOG\_1 SEM2-314  
 %SNASW-4-TC\_LOG\_2 SEM2-314  
 %SNASW-4-TNBM\_LOG\_0 SEM2-315  
 %SNASW-4-TNBM\_LOG\_1 SEM2-315  
 %SNASW-4-TNBM\_LOG\_2 SEM2-315  
 %SNASW-4-TNBM\_LOG\_3 SEM2-315  
 %SNASW-4-TNBM\_LOG\_4 SEM2-315  
 %SNASW-4-TNBM\_LOG\_5 SEM2-316  
 %SNASW-4-TNBM\_LOG\_6 SEM2-316  
 %SNASW-4-TNTL\_LOG\_0 SEM2-316  
 %SNASW-3-TNTL\_LOG\_1 SEM2-316  
 %SNASW-3-TRACE SEM2-316  
 %SNASW-3-TRACE\_2 SEM2-317  
 %SNASW-4-TS\_LOG\_0 SEM2-317  
 %SNASW-4-TS\_LOG\_1 SEM2-317  
 %SNASW-4-TS\_LOG\_2 SEM2-317  
 %SNASW-4-TS\_LOG\_6 SEM2-318  
 %SNASW-4-TS\_LOG\_7 SEM2-318  
 %SNASW-3-TS\_LOG\_13 SEM2-318  
 %SNMP-3-AUTHFAIL SEM2-319  
 %SNMP-3-BADOID SEM2-319  
 %SNMP-3-BADVALUE SEM2-319  
 %SNMP-3-CPUHOG SEM2-319  
 %SNMP-4-NOENGINEID SEM2-320  
 %SNMP-4-NOFLASH SEM2-320  
 %SNMP-3-TRAPBLOCK SEM2-320  
 %SNMP-4-TRAPDROP SEM2-320  
 %SNMP-3-TRAPINTR SEM2-321  
 %SNMP-5-WARMSTART SEM2-321  
 %SNMP\_MGR-3-BADAGETIMER SEM2-321  
 %SNMP\_MGR-4-BADAUTHTYPE SEM2-321  
 %SNMP\_MGR-3-BADINFORMTRANSPORT SEM2-322  
 %SNMP\_MGR-3-BADOP SEM2-322  
 %SNMP\_MGR-3-BADPDUTYPE SEM2-322  
 %SNMP\_MGR-4-BADRESPONSESTATUS SEM2-322  
 %SNMP\_MGR-3-BADTRANSPORT SEM2-322  
 %SNMP\_MGR-3-BADUSECOUNT SEM2-323  
 %SNMP\_MGR-4-EMPTYQUEUE SEM2-323  
 %SNMP\_MGR-3-MISSINGHOST SEM2-323  
 %SNMP\_MGR-4-NOCANCEL SEM2-323

%SNMP\_MGR-3-NOPROC SEM2-324  
%SNMP\_MGR-4-NOTENABLED SEM2-324  
%SNMP\_MGR-3-RESPDROP SEM2-324  
%SNMP\_MGR-3-SESSIONINUSE SEM2-324  
%SOI-2-BADPXMCOMMUNITY SEM2-325  
%SOI-2-BADPXMIPADDR SEM2-325  
%SOI-2-BADPXMMESSAGE SEM2-325  
%SOI-2-PORTCREERR SEM2-325  
%SOI-2-PORTLOCERR SEM2-325  
%SOI-2-PORTOPENERR SEM2-326  
%SOI-2-PORTREGFAIL SEM2-326  
%SOI-2-QUEUCREATFAIL SEM2-326  
%SONET-4-ALARM SEM2-326  
%SONET-3-APSCOMM SEM2-326  
%SONET-3-APSCOMMEST SEM2-327  
%SONET-3-APSCOMMLOST SEM2-327  
%SONET-4-APSM SEM2-327  
%SONET-3-APSNCHN SEM2-327  
%SONET-3-APSNOINTFC SEM2-327  
%SONET-3-BADAUTH SEM2-327  
%SONET-3-BADVER SEM2-328  
%SONET-3-MISVER SEM2-328  
%SONET-3-NOBUFFER SEM2-328  
%SONET-3-NOSOCKET SEM2-328  
%SONETMIB-1-DELETE SEM2-328  
%SONETMIB-1-MALLOCNEW SEM2-329  
%SONETMIB-3-NULLCFGPTR SEM2-329  
%SONICT-1-INITFAIL SEM2-329  
%SONICT-2-NOMEMORY SEM2-329  
%SPAN-4-DST\_ALREADY\_DST SEM2-330  
%SPAN-4-DST\_ALREADY\_SRC SEM2-330  
%SPAN-4-FTR\_ALREADY\_SRC SEM2-330  
%SPAN-3-MEM\_UNAVAIL SEM2-330  
%SPAN-4-RXOVFL SEM2-331  
%SPAN-4-SRC\_ALREADY\_DST SEM2-331  
%SPAN-4-SRC\_ALREADY\_FTR SEM2-331  
%SPAN-4-TXOVFL SEM2-331  
%SPAN-3-UNKN\_ERR SEM2-331  
%SPAN-3-UNKN\_ERR\_PORT SEM2-332  
%SPANTREE-7-BLOCK\_PORT\_TYPE SEM2-332  
%SPANTREE-2-BLOCK\_PVID\_LOCAL SEM2-332  
%SPANTREE-2-BLOCK\_PVID\_PEER SEM2-332  
%SPANTREE-3-PORT\_SELF\_LOOPED SEM2-333  
%SPANTREE-2-RECV\_1Q\_NON\_1QTRUNK SEM2-333  
%SPANTREE-7-RECV\_1Q\_NON\_TRUNK SEM2-333  
%SPANTREE-2-RECV\_BAD\_TLV SEM2-333  
%SPANTREE-2-RECV\_PVID\_ERR SEM2-334  
%SPANTREE-2-RX\_PORTFAST SEM2-334  
%SPANTREE-2-UNBLOCK\_CONSIST\_PORT SEM2-334  
%SPANTREE\_FAST-7-PORT\_FWD\_UPLINK SEM2-334  
%SPARC-3-DOWN SEM2-335  
%SPE-3-MSMGR\_REGISTRATION\_ERR SEM2-335  
%SPE-6-NULL\_OBJ SEM2-335  
%SPE-3-PM\_DB\_NO\_MEM SEM2-335  
%SPE-3-PM\_DIRECT\_MODEM\_QUERY\_ERR SEM2-335  
%SPE-3-PM\_SLOT\_NO\_MODULES SEM2-336  
%SPE-3-RECOVERY\_DNLD\_MAINT\_NO\_MEM SEM2-336  
%SPE-6-SM\_BUSIEDOUT SEM2-336  
%SPE-6-SM\_CLEARED SEM2-336  
%SPE-3-SM\_CRASHED SEM2-336  
%SPE-6-SM\_DEFER\_DOWNLOAD SEM2-336  
%SPE-3-SM\_DOWNLOAD\_FAILED SEM2-337  
%SPE-3-SM\_EVENT\_NO\_MEM SEM2-337  
%SPE-3-SM\_POST\_FAILED SEM2-337  
%SPE-3-SM\_RESPONSE\_NO\_MEM SEM2-337  
%SPE-6-SM\_SHUTDOWN SEM2-337  
%SPE-6-SM\_START\_DOWNLOAD SEM2-337  
%SPE-4-SPE\_ACT\_SESS\_WARN SEM2-337  
%SPE-4-SPE\_CONFIG\_WARN SEM2-338  
%SPE-6-SPE\_DNLD\_MAINT SEM2-338  
%SPE-6-SPE\_DNLD\_MAINT\_PROCESS SEM2-338  
%SPE-3-ST\_API\_ERR SEM2-338  
%SPE-3-ST\_EVENT\_NO\_MEM SEM2-338  
%SRCP\_APP-6-DNS\_QUEUE\_FAILED SEM2-339  
%SRCP\_APP-6-PROCESS\_CREATION\_FAILED SEM2-339  
%SRCP\_APP-6-SOCKET\_OPEN\_FAILED SEM2-339  
%SRCP\_APP-6-SYS\_QUEUE\_FAILED SEM2-339  
%SRP-4-ALARM SEM2-339  
%SRP-3-DUP\_MAC\_ADDR SEM2-340  
%SRP-3-RING\_ID\_ERROR SEM2-340  
%SRP-3-SINGLE\_NODE\_TOPO SEM2-340  
%SSE-3-BADMEMORY SEM2-340  
%SSE-2-BOGUSEQ SEM2-340  
%SSE-3-COMPERR SEM2-341  
%SSE-2-HUNG SEM2-341  
%SSE-2-HWFAILURE SEM2-341  
%SSE-2-MEMERROR SEM2-341  
%SSE-2-NESTADDR SEM2-342

%SSE-2-NOMATCH SEM2-342  
 %SSE-2-NOMEMORY SEM2-342  
 %SSE-2-NOTZERO SEM2-342  
 %SSE-2-SWFAILURE SEM2-342  
 %SSH-5-DISABLED SEM2-343  
 %SSH-5-ENABLED SEM2-343  
 %SSH-3-KEYPAIR SEM2-343  
 %SSH-3-PRIVATEKEY SEM2-343  
 %SSRP-3-UNSUPPORTED SEM2-343  
 %STANDBY-3-BADAUTH SEM2-344  
 %STANDBY-3-DIFFVIP1 SEM2-344  
 %STANDBY-3-DUPADDR SEM2-344  
 %STANDBY-3-DUPVIP1 SEM2-344  
 %STANDBY-3-DUPVIP2 SEM2-344  
 %STANDBY-3-DUPVIP3 SEM2-345  
 %STANDBY-3-MISCONFIG SEM2-345  
 %STANDBY-3-NOSOCKET SEM2-345  
 %STANDBY-6-STATECHANGE SEM2-345  
 %STUN-3-BADCONN SEM2-345  
 %STUN-3-BADLENOP SEM2-346  
 %STUN-3-BADMAGIC SEM2-346  
 %STUN-3-BADMAGICTCP SEM2-346  
 %STUN-3-BADPASSIVEOPEN SEM2-346  
 %STUN-3-CONNILLSTATE SEM2-346  
 %STUN-6-CONNOPENFAIL SEM2-346  
 %STUN-4-ERR SEM2-347  
 %STUN-2-NOBUF SEM2-347  
 %STUN-3-NOINPIDB SEM2-347  
 %STUN-2-NOMEMORY SEM2-347  
 %STUN-2-NOTGI SEM2-347  
 %STUN-6-OPENED SEM2-348  
 %STUN-6-OPENING SEM2-348  
 %STUN-6-PASSIVEOPEN SEM2-348  
 %STUN-6-PEERSHUTDOWN SEM2-348  
 %STUN-4-PEERSTATE SEM2-348  
 %STUN-6-RECONNECT SEM2-348  
 %STUN-3-SENDPUNT SEM2-349  
 %STUN-3-SENDPUNTTCP SEM2-349  
 %STUN-6-TCPFINI SEM2-349  
 %STUN-6-TCPPEERSHUT SEM2-349  
 %SUBSYS-2-BADCLASS SEM2-349  
 %SUBSYS-2-BADSEQUENCE SEM2-350  
 %SUBSYS-2-BADVERSION SEM2-350  
 %SUBSYS-2-MISMATCH SEM2-350  
 %SUBSYS-2-NOTFOUND SEM2-350  
 %SUBSYS-3-PAGEZERO SEM2-350  
 %SUBSYS-2-RECURSION SEM2-351  
 %SW56-3-ERR\_MSGQ SEM2-351  
 %SW56-1-INITSYS SEM2-351  
 %SWITCH-1-NOMEMORY SEM2-351  
 %SW\_VLAN-4-BAD\_PM\_VLAN\_COOKIE\_RETURNED SEM2-352  
 %SW\_VLAN-4-BAD\_VLAN\_CONFIGURATION\_FILE SEM2-352  
 %SW\_VLAN-4-BAD\_VLAN\_CONFIGURATION\_FILE\_VERSION SEM2-352  
 %SW\_VLAN-4-BAD\_VLAN\_TIMER\_ACTIVE\_VALUE SEM2-352  
 %SW\_VLAN-4-IFS\_FAILURE SEM2-353  
 %SW\_VLAN-4-NO\_PM\_COOKIE\_RETURNED SEM2-353  
 %SW\_VLAN-6-OLD\_CONFIG\_FILE\_READ SEM2-353  
 %SW\_VLAN-3-VLAN\_PM\_NOTIFICATION\_FAILURE SEM2-353  
 %SW\_VLAN-4-VTP\_INTERNAL\_ERROR SEM2-354  
 %SW\_VLAN-4-VTP\_INVALID\_DATABASE\_DATA SEM2-354  
 %SW\_VLAN-4-VTP\_INVALID\_EVENT\_DATA SEM2-354  
 %SW\_VLAN-3-VTP\_PROTOCOL\_ERROR SEM2-354  
 %SYS-2-ALREADYFREE SEM2-355  
 %SYS-3-BADBLOCK SEM2-355  
 %SYS-2-BADBUFFER SEM2-355  
 %SYS-3-BADDISP SEM2-355  
 %SYS-3-BADFREEMAGIC SEM2-356  
 %SYS-3-BADFREEPTRS SEM2-356  
 %SYS-3-BADLINKTYPE SEM2-356  
 %SYS-2-BADLIST SEM2-356  
 %SYS-3-BADMAGIC SEM2-356  
 %SYS-3-BADPARAM SEM2-357  
 %SYS-2-BADPID SEM2-357  
 %SYS-2-BADPOOL SEM2-357  
 %SYS-2-BADPOOLMAGIC SEM2-357  
 %SYS-3-BADPRINT SEM2-357  
 %SYS-3-BADPROCESS SEM2-358  
 %SYS-3-BADREFCOUNT SEM2-358  
 %SYS-3-BAD\_RESET SEM2-358  
 %SYS-3-BADRESID SEM2-358  
 %SYS-2-BADSHARE SEM2-358  
 %SYS-2-BADSTACK SEM2-359  
 %SYS-6-BLKINFO SEM2-359  
 %SYS-2-BLOCKHUNG SEM2-359

%SYS-6-BOOT\_MESSAGES SEM2-359  
%SYS-6-BOOTTIME SEM2-359  
%SYS-2-CFORKBADFUNCT SEM2-360  
%SYS-2-CFORKLEV SEM2-360  
%SYS-2-CFORKMEM SEM2-360  
%SYS-2-CHUNKBADELESIZE SEM2-360  
%SYS-2-CHUNKBADFREEMAGIC SEM2-360  
%SYS-2-CHUNKBADMAGIC SEM2-361  
%SYS-2-CHUNKBADPOOLSIZE SEM2-361  
%SYS-2-CHUNKBADREFCOUNT SEM2-361  
%SYS-2-CHUNKBOUNDS SEM2-361  
%SYS-2-CHUNKBOUNDSIB SEM2-361  
%SYS-2-CHUNKEXPANDFAIL SEM2-362  
%SYS-2-CHUNKFREE SEM2-362  
%SYS-2-CHUNKINCONSIS SEM2-362  
%SYS-2-CHUNKINVALIDHDR SEM2-362  
%SYS-2-CHUNKNOMEMORY SEM2-362  
%SYS-2-CHUNKNOROOT SEM2-363  
%SYS-2-CHUNKPARTIAL SEM2-363  
%SYS-2-CHUNKSIBLINGS SEM2-363  
%SYS-5-CONFIG SEM2-363  
%SYS-2-CONFIG\_DOWNFAIL SEM2-363  
%SYS-5-CONFIG\_I SEM2-364  
%SYS-4-CONFIG\_NEWER SEM2-364  
%SYS-4-CONFIG\_NOLOCK SEM2-364  
%SYS-3-CONFIG\_NO\_PRIVATE SEM2-364  
%SYS-5-CONFIG\_NV SEM2-364  
%SYS-3-CONFIG\_NV\_DATA SEM2-365  
%SYS-3-CONFIG\_NV\_ERR SEM2-365  
%SYS-5-CONFIG\_NV\_I SEM2-365  
%SYS-4-CONFIG\_NV\_OVERRUN SEM2-365  
%SYS-3-CONFIG\_SYS\_ERR SEM2-365  
%SYS-3-CPUHOG SEM2-366  
%SYS-3-CRASHINFOINITFAIL SEM2-366  
%SYS-3-DMPMEM SEM2-366  
%SYS-4-DUAL\_MESSAGE SEM2-366  
%SYS-3-DUP\_TIMER SEM2-366  
%SYS-2-EXCEPTIONDUMP SEM2-367  
%SYS-2-FREEBAD SEM2-367  
%SYS-2-FREEFREE SEM2-367  
%SYS-2-GETBUF SEM2-367  
%SYS-2-GETBUFFFAIL SEM2-368  
%SYS-3-HARIKARI SEM2-368  
%SYS-2-INLIST SEM2-368  
%SYS-2-INLIST1 SEM2-368  
%SYS-2-INPUTQ SEM2-368  
%SYS-2-INSCHED SEM2-369  
%SYS-3-INTPRINT SEM2-369  
%SYS-2-INTSCHED SEM2-369  
%SYS-3-INUSEFREE SEM2-369  
%SYS-4-INVALID\_IMAGE SEM2-369  
%SYS-3-INVMEMINT SEM2-370  
%SYS-2-LINKED SEM2-370  
%SYS-3-LOGGER\_DROPPED SEM2-370  
%SYS-3-LOGGER\_FLUSHED SEM2-370  
%SYS-3-LOGGER\_FLUSHING SEM2-371  
%SYS-2-LOWMEM SEM2-371  
%SYS-2-MALLOCFAIL SEM2-371  
%SYS-6-MEMDUMP SEM2-371  
%SYS-3-MGDTIMER SEM2-372  
%SYS-3-MGDTMRRUN SEM2-372  
%SYS-3-MSGLOST SEM2-372  
%SYS-6-MTRACE SEM2-372  
%SYS-2-NOBLOCK SEM2-372  
%SYS-6-NOBRIDGE SEM2-373  
%SYS-3-NOELEMENT SEM2-373  
%SYS-2-NOMEMFRG SEM2-373  
%SYS-2-NOMEMORY SEM2-373  
%SYS-2-NOPROCESS SEM2-373  
%SYS-2-NOTDEAD SEM2-374  
%SYS-2-NOTQ SEM2-374  
%SYS-2-NULLCHUNK SEM2-374  
%SYS-3-NULLIDB SEM2-374  
%SYS-7-NV\_BLOCK\_INIT SEM2-374  
%SYS-4-NV\_BLOCK\_INITFAIL SEM2-375  
%SYS-4-NV\_CHKSUM SEM2-375  
%SYS-4-NV\_CHKSUM\_INTR SEM2-375  
%SYS-4-NV\_NOLOCK SEM2-375  
%SYS-3-NZREFCNT SEM2-376  
%SYS-5-OUTSETUP SEM2-376  
%SYS-3-OVERRUN SEM2-376  
%SYS-1-OVERTEMP SEM2-376  
%SYS-3-OVFPRINT SEM2-376  
%SYS-6-PROCINFO SEM2-377  
%SYS-2-QCOUNT SEM2-377  
%SYS-6-READ\_BOOTFILE\_FAIL SEM2-377  
%SYS-4-REGEXP SEM2-377  
%SYS-5-RELOAD SEM2-377

%SYS-4-RELOAD\_ATTEMPT SEM2-378  
 %SYS-5-RESTART SEM2-378  
 %SYS-2-SELFLINKED SEM2-378  
 %SYS-2-SHARED SEM2-378  
 %SYS-2-SHARED1 SEM2-378  
 %SYS-2-SIGNAL SEM2-379  
 %SYS-2-SNMP0IDX SEM2-379  
 %SYS-4-SNMP\_HOSTCONFIGSET SEM2-379  
 %SYS-4-SNMP\_NETCONFIGSET SEM2-379  
 %SYS-4-SNMP\_WRITENET SEM2-379  
 %SYS-3-SOCKUNKN SEM2-380  
 %SYS-2-SPEC SEM2-380  
 %SYS-6-STACKLOW SEM2-380  
 %SYS-5-TABLEERR SEM2-380  
 %SYS-6-TESTINFO SEM2-380  
 %SYS-3-TIMERHOG SEM2-381  
 %SYS-3-TIMERNEG SEM2-381  
 %SYS-2-WATCHDOG SEM2-381  
 %SYS-3-WRONGFREELIST SEM2-381  
 %SYS-2-WRONGPOOL SEM2-381  
 %SYSCTLR-5-AUTH\_FAILED SEM2-382  
 %SYSCTLR-3-BAD\_CALL SEM2-382  
 %SYSCTLR-6-BAD\_IP\_ADDR SEM2-382  
 %SYSCTLR-3-DISCOVER\_SOCKET\_BIND SEM2-382  
 %SYSCTLR-3-DISCOVER\_SOCKET\_OPEN SEM2-382  
 %SYSCTLR-3-DUPLICATE\_SHELF SEM2-383  
 %SYSCTLR-4-HMON\_POLL SEM2-383  
 %SYSCTLR-3-HMON\_SETUP\_FAILED SEM2-383  
 %SYSCTLR-3-INVALID\_SDP\_VERSION SEM2-383  
 %SYSCTLR-4-SDP\_TIMEOUT SEM2-383  
 %SYSCTLR-3-SDP\_TIMER\_ERROR SEM2-384  
 %SYSCTLR-6-SHELF\_ADD SEM2-384  
 %SYSCTLR-4-SHELF\_CONF\_CHANGED SEM2-384  
 %SYSCTLR-3-SHELF\_MSGFAIL SEM2-384  
 %SYSCTLR-3-SHELF\_PROTO SEM2-384  
 %SYSCTLR-4-SHELF\_RELOAD SEM2-385  
 %SYSCTLR-4-SHELF\_REMOVE SEM2-385  
 %SYSCTLR-6-SHELF\_RESTORED SEM2-385  
 %SYSCTLR-4-SNMP\_NOT\_RESPONDING SEM2-385  
 %SYSLOG\_SERVER-3-CREATE\_ERR SEM2-385  
 %SYSLOG\_SERVER-4-DUP\_FILE SEM2-386  
 %SYSLOG\_SERVER-4-FILE\_CORRUPTED SEM2-386  
 %SYSLOG\_SERVER-3-ILLEGAL\_FS SEM2-386  
 %SYSLOG\_SERVER-3-MFS\_MAX SEM2-386  
 %SYSLOG\_SERVER-4-NO\_CONFIG\_CHANGE SEM2-386  
 %SYSLOG\_SERVER-4-NO\_MEM SEM2-387  
 %SYSLOG\_SERVER-4-NO\_MOBIUS SEM2-387  
 %SYSLOG\_SERVER-3-OPEN\_FILE\_ERR SEM2-387  
 %SYSLOG\_SERVER-3-PARSING\_ERR SEM2-387  
 %SYSLOG\_SERVER-3-READ\_ERR SEM2-387  
 %SYSLOG\_SERVER-3-UNKNOWN\_NAME SEM2-388  
 %SYSLOG\_SERVER-3-WRITE\_ERR SEM2-388  
 %SYSMGT\_RPC-3-IPC\_ERROR SEM2-388  
 %SYSMGT\_RPC-3-NETMGT\_EVENT SEM2-388  
 %SYSMGT\_RPC-3-RPC\_ERROR SEM2-389  
 %TIE1SUNI-1-NOMEMORY SEM2-389  
 %TAC-4-NOTIMEOUT SEM2-389  
 %TAC-3-PICKCTX SEM2-389  
 %TAC-6-SENDTMO SEM2-390  
 %TAC-4-SERVREF SEM2-390  
 %TAC-3-XTACACL SEM2-390  
 %TAGCON-4-ADDR\_PROC SEM2-390  
 %TAGCON-4-ADDRQ SEM2-391  
 %TAGCON-3-ALLOC SEM2-391  
 %TAGCON-3-BUFFERBIND SEM2-391  
 %TAGCON-3-CONSISTENCY SEM2-391  
 %TAGCON-3-DEADADJ SEM2-391  
 %TAGCON-3-DEFCASE\_BINDING\_PIE SEM2-392  
 %TAGCON-3-DIRADJTREE SEM2-392  
 %TAGCON-3-EVENTQ SEM2-392  
 %TAGCON-3-INIT SEM2-392  
 %TAGCON-4-INIT\_TAG\_ALLOC SEM2-393  
 %TAGCON-3-LATRENUMWRAP SEM2-393  
 %TAGCON-3-LCLTAG\_ALLOC SEM2-393  
 %TAGCON-3-NOTIMPL SEM2-393  
 %TAGCON-3-PEERSM SEM2-394  
 %TAGCON-3-PROCESS SEM2-394  
 %TAGCON-3-RADIXTREE SEM2-394  
 %TAGCON-5-SEND SEM2-394  
 %TAGCON-3-SM SEM2-394  
 %TAGCON-3-TDPID SEM2-395  
 %TAGCON-3-TDPID\_ADDR\_TBL SEM2-395  
 %TAGCOS-3-MEMORY\_EXHAUST SEM2-395  
 %TAGCOS-3-PREFIX SEM2-395  
 %TBRIDGE-4-BAD\_ENCAP SEM2-396  
 %TBRIDGE-4-BADXMAC SEM2-396  
 %TBRIDGE-4-BTELIMITREACHED SEM2-396  
 %TBRIDGE-4-GIANT SEM2-396

- %TBRIDGE-4-INVALIDMEDIA SEM2-397
- %TBRIDGE-4-NOVCDROP SEM2-397
- %TBRIDGE-4-NOVCFLOOD SEM2-397
- %TBRIDGE-4-SMF\_ACTION SEM2-397
- %TBRIDGE-4-VCPAKDROP SEM2-397
- %TCATM-3-BADINSERT SEM2-398
- %TCATM-3-BADSTATE SEM2-398
- %TCATM-4-HOPCOUNT\_EQUALLED SEM2-398
- %TCATM-4-INTERFACE SEM2-398
- %TCATM-4-MALFORMED\_PIE SEM2-399
- %TCATM-4-NEWVCINRANGE SEM2-399
- %TCATM-4-NOTAGIP SEM2-399
- %TCATM-3-NOTRUNNING SEM2-399
- %TCATM-3-OFFLIST SEM2-400
- %TCATM-4-OLDVCINRANGE SEM2-400
- %TCATM-3-ONLIST SEM2-400
- %TCATM-3-PROCESS SEM2-400
- %TCATM-4-RESOURCE\_LIMIT SEM2-401
- %TCATM-3-UNEXPECTEDBIND SEM2-401
- %TCATM-4-XCONNECT\_FAILED SEM2-401
- %TCP-2-ACCEPT SEM2-401
- %TCP-6-BADAUTH SEM2-402
- %TCP-2-BADQUEUE SEM2-402
- %TCP-2-BADREFCNT SEM2-402
- %TCP-2-BADTCBREFCNT SEM2-402
- %TCP-2-BUFFER SEM2-402
- %TCP-2-HALFCLOSE SEM2-403
- %TCP-6-INTERCEPT SEM2-403
- %TCP-2-INVALIDTCB SEM2-403
- %TCP-2-INVALIDTCPENCAPS SEM2-403
- %TCP-6-NOBUFF SEM2-403
- %TCP-3-NOTFOUND SEM2-404
- %TCP-2-NOTREADY SEM2-404
- %TCP-2-PUTBYTE SEM2-404
- %TCP-6-TOOBIG SEM2-404
- %TDM-4-TDM\_BAD\_CONNECT SEM2-405
- %TDM-3-TDM\_BADUNIT SEM2-405
- %TDM-1-TDM\_INITFAIL SEM2-405
- %TDM-1-TDM\_MB\_INITFAIL SEM2-405
- %TDM\_CLOCK\_SYNCHRONIZATION-4-TDMCLK\_CHAN  
GE SEM2-406
- %TDM\_CLOCK\_SYNCHRONIZATION-4-TDMCLK\_LOST\_  
LOCK SEM2-406
- %TDM\_CLOCK\_SYNCHRONIZATION-4-TDMCLK\_STATE  
\_CHG SEM2-406
- %TDM\_CLOCK\_SYNCHRONIZATION-4-TDMCLK\_STATE  
\_ERR SEM2-406
- %TDP-5-ACL SEM2-406
- %TDP-5-ACL1 SEM2-407
- %TDP-3-BAD\_ADDRESS\_LEN SEM2-407
- %TDP-3-BAD\_METRIC\_LEN SEM2-407
- %TDP-3-BAD\_MLIST\_TYPE SEM2-408
- %TDP-3-BAD\_PIE SEM2-408
- %TDP-3-BAD\_PREFIX\_LEN SEM2-408
- %TDP-3-CONSISTENCY SEM2-408
- %TDP-3-GENERAL SEM2-409
- %TDP-4-IDENT SEM2-409
- %TDP-5-INFO SEM2-409
- %TDP-3-KA\_NOMEMORY SEM2-409
- %TDP-3-MALFORMED\_PIE SEM2-409
- %TDP-4-PTCL SEM2-410
- %TDP-3-PTCLREAD SEM2-410
- %TDP-3-SM SEM2-410
- %TDP-3-TAGATM\_BAD\_RANGE SEM2-410
- %TDP-3-TAGATM\_NOMEM SEM2-410
- %TDP-3-UNEXPECTED\_ALIST\_TYPE SEM2-411
- %TDP-3-UNEXPECTED\_BLIST\_TYPE SEM2-411
- %TDP-3-UNEXPECTED\_PIE SEM2-411
- %TDP-3-UNKNOWN\_ALIST\_TYPE SEM2-412
- %TDP-3-UNKNOWN\_BLIST\_TYPE SEM2-412
- %TESTPA-3-DMAERROR SEM2-412
- %TESTPA-3-INITFAIL SEM2-412
- %TESTPA-3-NOTANALYZED SEM2-413
- %TESTPA-3-POWEREDOFF SEM2-413
- %TFIB-2-BADENCAPLEN SEM2-413
- %TFIB-5-CLEAR\_COUNTERS SEM2-413
- %TFIB-2-CONSISTENCY SEM2-414
- %TFIB-4-FIBCBLK SEM2-414
- %TFIB-7-INVALIDINDEX SEM2-414
- %TFIB-2-INVALIDLIST SEM2-414
- %TFIB-7-INVALIDTAG SEM2-414
- %TFIB-2-MEMORY SEM2-415
- %TFIB-7-NONDB SEM2-415
- %TFIB-7-NOPATH SEM2-415
- %TFIB-7-NULLFIB SEM2-415
- %TFIB-7-NULLPATH SEM2-415
- %TFIB-7-NULLREWRITE SEM2-416
- %TFIB-7-RESOLUTION SEM2-416
- %TFIB-7-SCANSABORTED SEM2-416

%TI1570-5-BADVCSETUP SEM2-416  
 %TI1570-3-BLOCKCMDFAIL SEM2-417  
 %TI1570-1-DEVICEINITFAIL SEM2-417  
 %TI1570-3-DISCOVER SEM2-417  
 %TI1570-3-FAILSETUPVC SEM2-417  
 %TI1570-3-FAILTEARDOWNVC SEM2-418  
 %TI1570-7-FRAMERINT SEM2-418  
 %TI1570-1-IDBINITFAIL SEM2-418  
 %TI1570-1-INITFAIL SEM2-418  
 %TI1570-1-INVALIDCONFIG SEM2-418  
 %TI1570-3-NOPCIMB SEM2-419  
 %TI1570-3-NOPCIMEMORY SEM2-419  
 %TI1570-3-NOSYSMEMORY SEM2-419  
 %TI1570-3-NOTTI1570 SEM2-419  
 %TI1570-3-NOTXDESCSPACE SEM2-419  
 %TI1570-1-PCIMEMNOTENOUGH SEM2-420  
 %TI1570-3-PCI\_PERROR SEM2-420  
 %TI1570-3-PLXNOTFOUND SEM2-420  
 %TI1570-3-RBDCORRUPT SEM2-420  
 %TI1570-3-RXDMANOTINACT SEM2-421  
 %TI1570-3-RXFREEZE SEM2-421  
 %TI1570-3-RX\_HALT SEM2-421  
 %TI1570-3-TXDATANOTALIGNED SEM2-421  
 %TI1570-3-TXDMANOTFLUSHED SEM2-422  
 %TI1570-3-TXFREEZE SEM2-422  
 %TI1570-3-UNSUPPORTED SEM2-422  
 %TIB-3-GENERAL SEM2-422  
 %TIB-3-INIT SEM2-423  
 %TIB-3-LCLTAG SEM2-423  
 %TIB-3-RADIXTREE SEM2-423  
 %TIB-3-REMOTETAG SEM2-423  
 %TIB-3-SM SEM2-423  
 %TIB-3-TIBRENUMWRAP SEM2-424  
 %TIGER-3-BADADDR\_MBE SEM2-424  
 %TIGER-3-BADADDR\_MBE\_RMW SEM2-424  
 %TIGER-3-BADADDR\_SBE SEM2-424  
 %TIGER-3-BADADDR\_SBE\_RMW SEM2-425  
 %TIGER-2-MALLOC SEM2-425  
 %TIGER-2-MBE SEM2-425  
 %TIGER-2-MBE\_RMW SEM2-425  
 %TIGER-2-PARITY SEM2-426  
 %TIGER-2-PARITY\_INFO SEM2-426  
 %TIGER-3-SBE SEM2-426  
 %TIGER-3-SBE\_HARD SEM2-426  
 %TIGER-3-SBE\_LIMIT SEM2-426  
 %TIGER-3-SBE\_RMW SEM2-427  
 %TIGER-3-SBE\_RMW\_LIMIT SEM2-427  
 %TIGER-3-SYNDROME\_MBE SEM2-427  
 %TIGER-3-SYNDROME\_SBE SEM2-427  
 %TIGER-3-SYNDROME\_SBE\_LIMIT SEM2-428  
 %TLV-3-GET SEM2-428  
 %TLV-3-UPDATE SEM2-428  
 %TMQ-3-NOTFOUND SEM2-428  
 %TN-2-BADLOGIN SEM2-429  
 %TN-3-BADSTATE SEM2-429  
 %TN-3-READLINE SEM2-429  
 %TN3270-2-INP\_OVF1 SEM2-429  
 %TR-3-ADPCHK SEM2-430  
 %TR-3-ADPCHKFATAL SEM2-430  
 %TR-3-BADBRDGPparms SEM2-430  
 %TR-3-BADBUFFSIZE SEM2-430  
 %TR-3-BADFIRM SEM2-431  
 %TR-3-BADFIRMTYPE SEM2-431  
 %TR-3-BADFUNC SEM2-431  
 %TR-3-BADMUL SEM2-431  
 %TR-3-BADRNGNUM SEM2-432  
 %TR-3-BADSTART SEM2-432  
 %TR-3-BADUNIT SEM2-432  
 %TR-3-DIAGFAIL SEM2-432  
 %TR-3-INITFAIL SEM2-432  
 %TR-3-INTFAIL SEM2-433  
 %TR-3-MODEFAIL SEM2-433  
 %TR-3-NOFIRM SEM2-433  
 %TR-2-NOMEMORY SEM2-433  
 %TR-3-OPENFAIL SEM2-434  
 %TR-3-OPENFAIL2 SEM2-434  
 %TR-2-PANIC SEM2-434  
 %TR-2-PANICINF SEM2-434  
 %TR-2-PANICTYPE SEM2-435  
 %TR-3-RESETFAIL SEM2-435  
 %TR-3-SETBRIDGEFAIL SEM2-435  
 %TR-3-SETFUNFAIL SEM2-435  
 %TR-3-SETGRPFail SEM2-435  
 %TR-6-STATE SEM2-436  
 %TR-6-STATRING SEM2-436  
 %TR-3-WIREFAULT SEM2-436  
 %TRUNK-3-BADCARDTYPE SEM2-436  
 %TRUNK-3-BADCLOCK SEM2-437

%TRUNK-3-BADFW SEM2-437  
%TRUNK-3-BADMSG SEM2-437  
%TRUNK-3-BADSLLOT SEM2-437  
%TRUNK-3-HBEAT SEM2-437  
%TRUNK-3-INITFAIL SEM2-438  
%TRUNK-3-MSGTMOUT SEM2-438  
%TRUNK-3-NOMEM SEM2-438  
%TRUNK-3-NOMSGS SEM2-438  
%TRUNK\_CLOCK-6-BAD\_CLOCKS SEM2-439  
%TRUNK\_CLOCK-6-EXTERNAL SEM2-439  
%TRUNK\_CLOCK-6-FREERUN SEM2-439  
%TRUNK\_CLOCK-3-NOMEMORY SEM2-439  
%TRUNK\_CLOCK-6-SWITCH SEM2-439  
%TRUNK\_CLOCK-6-TRUNK SEM2-440  
%TRUNK\_DFC-3-CONTRCREATE SEM2-440  
%TRUNK\_DFC-3-DSX3CONTEXT SEM2-440  
%TRUNK\_DFC-3-SDRAM\_TEST\_FAILED SEM2-440  
%TRUNK\_DFC-3-TRUNK\_FIRMWARE\_DOWNLOAD\_FAILED SEM2-441  
%TRUNK\_DFC-3-TRUNK\_FIRMWARE\_NOT\_READY SEM2-441  
%TRUNK\_DFC-3-TRUNK\_RESET\_FAILED SEM2-441  
%TRUNK\_DFC-3-TRUNK\_ROM\_FAILED SEM2-441  
%TRUNK\_DFC-3-TRUNK\_SLOT\_CREATE SEM2-442  
%TSP-3-CAPABILITYMISMATCH SEM2-442  
%TSP-3-DSPALARM SEM2-442  
%TSP-3-FSM\_ERROR SEM2-442  
%TSP-3-NOEVENT SEM2-443  
%TSP-5-PRI SEM2-443  
%TTY-3-AUTOCONFIG SEM2-443  
%TTY-3-NOPROCESS SEM2-443  
%TTYDRIVER-3-BADENCAP SEM2-444  
%TTYDRIVER-2-NOBRKPAK SEM2-444  
%TTYDRIVER-2-NOBUF SEM2-444  
%TTYDRIVER-2-NOBUFPOOL\_ASYNC SEM2-444  
%TTYDRIVER-2-NOMEM SEM2-445  
%TTYDRIVER-3-NOPARTS SEM2-445  
%TTYDRIVER-3-NOTXPART SEM2-445  
%TTYDRIVER-3-RTSLOW SEM2-445  
%TTYDRIVER-3-UNKNOWN\_PORT\_ARCH\_TYPE SEM2-445  
%TUN-5-RECURDOWN SEM2-446  
%TXCONN-3-BADLICENSEKEY SEM2-446  
%TXCONN-3-BADMODE SEM2-446  
%TXCONN-3-BADRLU SEM2-447  
%TXCONN-5-CONNIDLETIMEOUT SEM2-447  
%TXCONN-3-INVALIDTRANS SEM2-447  
%TXCONN-3-NOSESSION SEM2-447  
%TXCONN-5-SECFAIL SEM2-447  
%TXCONN-5-TARGETDOWN SEM2-448  
%TXCONN-5-TARGETUP SEM2-448  
%TXCONN-5-TRANSIDLETIMEOUT SEM2-448  
%TXCONN-3-TXEXCEPTION SEM2-448  
%UBR7200-6-ACTIVE SEM2-449  
%UBR7200-5-AUTHFAIL SEM2-449  
%UBR7200-3-BADARPReply SEM2-449  
%UBR7200-3-BADARPreQuest SEM2-449  
%UBR7200-3-BADIPSource SEM2-449  
%UBR7200-5-BADMNCSMSG SEM2-450  
%UBR7200-4-BADTXOFFSET SEM2-450  
%UBR7200-3-BADUSPORT SEM2-450  
%UBR7200-3-BURSTINUSE SEM2-450  
%UBR7200-3-CHASSIS SEM2-450  
%UBR7200-5-CLASSFAIL SEM2-451  
%UBR7200-6-CMMOVED SEM2-451  
%UBR7200-3-CONFIG SEM2-451  
%UBR7200-4-COOKIE SEM2-451  
%UBR7200-0-CPUCARD SEM2-451  
%UBR7200-3-DBDSPDEAD SEM2-451  
%UBR7200-6-DBDSPDOWNLOADDONE SEM2-452  
%UBR7200-3-DBDSPDOWNLOADERR1 SEM2-452  
%UBR7200-3-DBDSPDOWNLOADERR2 SEM2-452  
%UBR7200-3-DBDSPDOWNLOADERR3 SEM2-452  
%UBR7200-6-DBDSPDOWNLOADSTART SEM2-452  
%UBR7200-3-DBDSPERR1 SEM2-452  
%UBR7200-3-DBDSPERR2 SEM2-453  
%UBR7200-3-DBDSPERR3 SEM2-453  
%UBR7200-3-DBDSPERR4 SEM2-453  
%UBR7200-3-DBDSPERR5 SEM2-453  
%UBR7200-3-DBDSPERR6 SEM2-453  
%UBR7200-3-DBDSPIDERR SEM2-453  
%UBR7200-5-DBDSPRECOVER1 SEM2-454  
%UBR7200-5-DBDSPRECOVER2 SEM2-454  
%UBR7200-5-DBDSPRECOVER3 SEM2-454  
%UBR7200-5-DBDSPUP SEM2-454  
%UBR7200-6-DBDSPVERSION SEM2-454  
%UBR7200-3-DBFPGAERR SEM2-454  
%UBR7200-3-DBPLX9050ERR SEM2-455



%UBR7200-3-DBPLX9080ERR SEM2-455  
 %UBR7200-1-DISCOVER SEM2-455  
 %UBR7200-6-DRVMP SEM2-455  
 %UBR7200-4-DUPLICATEMAC SEM2-455  
 %UBR7200-6-FREERUN SEM2-455  
 %UBR7200-6-HOLDOVER SEM2-456  
 %UBR7200-4-HWFAULT SEM2-456  
 %UBR7200-3-INTERCEPT SEM2-456  
 %UBR7200-6-LOS SEM2-456  
 %UBR7200-0-LOWPOWERCPU SEM2-456  
 %UBR7200-4-MACBLKSIZE SEM2-456  
 %UBR7200-5-MAXHOST SEM2-457  
 %UBR7200-4-NOCPUPER SEM2-457  
 %UBR7200-3-NOFORK SEM2-457  
 %UBR7200-3-NOMAC SEM2-457  
 %UBR7200-3-NOMEM SEM2-457  
 %UBR7200-3-NOMORESIDS SEM2-458  
 %UBR7200-5-NOMULTIPLEUPSTREAMS SEM2-458  
 %UBR7200-3-NOTCMTS SEM2-458  
 %UBR7200-5-NOTIMPLMENTEDMNCMSG SEM2-458  
 %UBR7200-3-NULLMAPPTR SEM2-458  
 %UBR7200-3-OVERLAPIP SEM2-459  
 %UBR7200-5-OVERLIMIT SEM2-459  
 %UBR7200-3-OWNERR SEM2-459  
 %UBR7200-6-PREAMLENADJUST SEM2-459  
 %UBR7200-4-RECALLED\_NPE SEM2-459  
 %UBR7200-6-REFLOCK SEM2-460  
 %UBR7200-3-SLOTS SEM2-460  
 %UBR7200-3-SPIERRNRD SEM2-460  
 %UBR7200-3-SPIERRR SEM2-460  
 %UBR7200-3-SPIERRRBS SEM2-460  
 %UBR7200-3-SPIERRW SEM2-461  
 %UBR7200-3-SPIERRW\_CHID SEM2-461  
 %UBR7200-6-SRCMP SEM2-461  
 %UBR7200-0-TEMPHIGH SEM2-461  
 %UBR7200-5-TIMESCH SEM2-461  
 %UBR7200-5-UNAUTHSIDTIMEOUT SEM2-462  
 %UBR7200-4-UNKNOWN SID SEM2-462  
 %UBR7200-5-UNREGSIDTIMEOUT SEM2-462  
 %UBR7200-5-UPDOWN SEM2-462  
 %UBR7200-5-USCONTEND SEM2-462  
 %UBR7200-5-USCONTHOP SEM2-463  
 %UBR7200-5-USFREQCHG SEM2-463  
 %UBR7200-5-USIPLCHG SEM2-463  
 %UBR7200-5-USIPLFIX SEM2-463  
 %UBR7200-4-VERSION\_MISMATCH SEM2-463  
 %UBR7200-0-VOLTHIGH SEM2-463  
 %UBR7200-0-VOLTLOW SEM2-464  
 %UCODE-3-BADCHKSUM SEM2-464  
 %UCODE-3-BADHWVER SEM2-464  
 %UCODE-3-HDRCORRUPT SEM2-464  
 %UCODE-3-IPCBUFFAIL SEM2-465  
 %UCODE-3-IPCINITFAIL SEM2-465  
 %UCODE-3-IPCINVALID SEM2-465  
 %UCODE-3-LDFAIL SEM2-465  
 %UCODE-3-NOBUF SEM2-465  
 %UCODE-3-NOFILE SEM2-466  
 %UCODE-3-NOROM SEM2-466  
 %UCODE-5-OBSOLETE SEM2-466  
 %UCODE-3-RDFAIL SEM2-466  
 %UCODE-3-SRCTYPE SEM2-466  
 %UCODE-3-TOOBIG SEM2-467  
 %UCODE-3-VERSIONCK SEM2-467  
 %UCODE-3-WRONGHARD SEM2-467  
 %UDLD-3-UDLD\_IDB\_ERROR SEM2-467  
 %UDLD-3-UDLD\_INTERNAL\_ERROR SEM2-468  
 %UDLD-3-UDLD\_INTERNAL\_IF\_ERROR SEM2-468  
 %UDLD-4-UDLD\_ONEWAYPATH SEM2-468  
 %UDLD-4-UDLD\_PORT\_DISABLED SEM2-468  
 %UNIX-1-SYSABORT SEM2-469  
 %UTIL-6-RANDOM SEM2-469  
 %UTIL-3-RANGEINCON SEM2-469  
 %UTIL-3-RANGENULLINPUT SEM2-470  
 %UTIL-3-TREE SEM2-470  
 %VFC-3-ERROR\_ANALYZE SEM2-470  
 %VFC-3-ERROR\_INIT\_BLDR SEM2-470  
 %VFC-3-ERROR\_INIT\_OVERLAY SEM2-471  
 %VFC-1-ERROR\_INTR SEM2-471  
 %VFC-1-INCORRECT\_DSP\_ID SEM2-471  
 %VFC-3-INCORRECT\_ID SEM2-471  
 %VFC-1-INVALID\_CONFIGURATION SEM2-471  
 %VFC-1-NODPMEMORY SEM2-472  
 %VFC-1-NO\_DSPM SEM2-472  
 %VFC-1-NO\_RING\_DESCRIPTOR SEM2-472  
 %VFC-1-TOOBIG SEM2-472  
 %VFC-1-UNKNOWN\_DSPM SEM2-472  
 %VINES-2-BADPARAM SEM2-473  
 %VINES-2-BADTIMER SEM2-473

% VINES-2-CACHEFAILED SEM2-473  
% VINES-2-CACHEUNSUPP SEM2-473  
% VINES-2-CONSISTENCY SEM2-474  
% VINES-2-CORRUPTENTRY SEM2-474  
% VINES-2-DUPADDR SEM2-474  
% VINES-2-ENCAPFAILED SEM2-475  
% VINES-6-FNNOTFOUND SEM2-475  
% VINES-2-INVALIDPATH SEM2-475  
% VINES-2-INVALIDROUTE SEM2-475  
% VINES-6-IPCNOROUTINE SEM2-476  
% VINES-2-NOBUFFERS SEM2-476  
% VINES-2-NOVENCAP SEM2-476  
% VINES-6-RPCNOSERVICE SEM2-477  
% VINES-6-RTNNOTFOUND SEM2-477  
% VIP-3-AFOVERFLOW SEM2-477  
% VIP-3-BADMALUCMD SEM2-477  
% VIP-3-CMDNOPASCB SEM2-478  
% VIP-3-NODISPATCH SEM2-478  
% VIP-2-NOICBS SEM2-478  
% VIP-3-UNDEFIDBTYPE SEM2-478  
% VIPMLP-2-NOVC SEM2-479  
% VOICE\_FSM-3-ERROR SEM2-479  
% VOICE\_FSM-5-MC3810\_NOTICE SEM2-479  
% VOICE\_RC-3-ERROR SEM2-479  
% VOICE\_RC-5-MC3810\_NOTICE SEM2-480  
% VOIPAAA-5-VOIP\_CALL\_HISTORY SEM2-480  
% VPA-3-BADVC SEM2-480  
% VPA-3-CMDFAIL SEM2-481  
% VPA-3-INITFAIL SEM2-481  
% VPA-6-NODATA SEM2-481  
% VPA-6-NOTDMBP SEM2-481  
% VPA-6-NOTSUPPORT SEM2-481  
% VPA-1-RPTFAIL SEM2-482  
% VPA-6-RXDFILLFAIL SEM2-482  
% VPA-6-RXVFILLFAIL SEM2-482  
% VPA-3-TDMFAIL SEM2-482  
% VPA-3-TSBUSY SEM2-482  
% VPA-3-TSNONBUSY SEM2-483  
% VPA-5-TXVFULL SEM2-483  
% VPA-3-UNEXPEVENT SEM2-483  
% VPD-4-CESCLK\_CHANGE SEM2-483  
% VPD-4-CESCLK\_INIT SEM2-483  
% VPD-4-CESCLK\_PLL\_LOST\_LOCK SEM2-484  
% VPD-1-UNKNOWN\_VIC SEM2-484  
% VPD-1-UNSUPPORTED\_VIC SEM2-484  
% VPD-1-VPD\_INIT\_FAILURE SEM2-484  
% VPDN-6-AUTHENERR SEM2-485  
% VPDN-6-AUTHENFAIL SEM2-485  
% VPDN-6-AUTHORERR SEM2-485  
% VPDN-6-AUTHORFAIL SEM2-486  
% VPDN-6-CLOSED SEM2-486  
% VPDN-6-DOWN SEM2-486  
% VPDN-6-MAX\_SESS\_EXCD SEM2-486  
% VPDN-4-MIDERROR SEM2-487  
% VPDN-5-NOIDB SEM2-487  
% VPDN-3-NORESOURCE SEM2-487  
% VPDN-4-REFUSED SEM2-487  
% VPDN-6-RESIZE SEM2-487  
% VPDN-6-SOFTSHUT SEM2-488  
% VPDN-6-TIMEOUT SEM2-488  
% VPDN-5-UNREACH SEM2-488  
% VSI\_M-3-INCOMPATVER SEM2-488  
% VSI\_M-2-XCONNFAIL SEM2-489  
% VTSP-3-CAPABILITYMISMATCH SEM2-489  
% VTSP-3-DOCALLHISFAIL SEM2-489  
% VTSP-3-DSPALARM SEM2-490  
% VTSP-3-DSP\_TIMEOUT SEM2-490  
% VTSP-4-FSM\_BAD\_EVENT SEM2-490  
% VTSP-3-FSM\_ERROR SEM2-490  
% VTSP-3-MSGSNDFAIL SEM2-490  
% VTSP-3-NOEVENT SEM2-491  
% VTSP-3-VTSP\_BLOCK SEM2-491  
% VTSP-3-VTSP\_CALL\_DISC\_FAILED SEM2-491  
% VTSP-3-VTSP\_HAIRPIN\_FAILED SEM2-491  
% VTSP-3-VTSP\_HAIRPINN SEM2-491  
% VTSP-3-VTSP\_HAIRPIN\_NOTPOSSIBLE SEM2-492  
% WCCP-5-CACHEFOUND SEM2-492  
% WCCP-1-CACHELOST SEM2-492  
% X25-3-ADDRESSBAD SEM2-492  
% X25-3-BADCONFIG SEM2-493  
% X25-3-BADCONFIGATTEMPT SEM2-493  
% X25-4-BADMBIT SEM2-493  
% X25-4-BADUPCALL SEM2-493  
% X25-3-COMPERR SEM2-494  
% X25-4-DEBUG\_LCI SEM2-494  
% X25-3-ERR\_SUBST\_XOT\_DNS\_DEST SEM2-494  
% X25-2-ILLP4 SEM2-494  
% X25-3-INTIMEQ SEM2-494

%X25-3-INVCFGID SEM2-495  
 %X25-4-LARGEPKSIZE SEM2-495  
 %X25-3-LCIBOGUS SEM2-495  
 %X25-5-NOBUF SEM2-495  
 %X25-3-NOLCI SEM2-495  
 %X25-3-NOTFINDBH SEM2-496  
 %X25-4-PARTIALMAP SEM2-496  
 %X25-5-PBPDBIT SEM2-496  
 %X25-5-PBPHOLDQ SEM2-496  
 %X25-5-PBPNOEND SEM2-496  
 %X25-3-PROFILENO SEM2-497  
 %X25-3-PVCBAD SEM2-497  
 %X25-4-RANGEUNUSED SEM2-497  
 %X25-3-SIZEBAD SEM2-497  
 %X25-3-SPURD1 SEM2-497  
 %X25-3-SYNCBAD SEM2-498  
 %X25-3-TRUNCATE\_ALT\_XOT\_DNS\_DEST SEM2-498  
 %X25-3-UNKNOWNPROT SEM2-498  
 %X25-4-VCLOSTSYNC SEM2-498  
 %X25-3-VERSIONBAD SEM2-499  
 %X25-3-X25DEENCINV SEM2-499  
 %X25-3-X25ENCINV SEM2-499  
 %X25-3-X25INT SEM2-499  
 %X25-3-X25NOCFG SEM2-499  
 %X25-3-X25NOTAVAIL SEM2-500  
 %X25-4-XOTHOSTWRONG SEM2-500  
 %X25-3-XOTINT SEM2-500  
 %X25-3-XOTPROTOCOL SEM2-500  
 %X25-4-XOTPVCDUPLICATE SEM2-500  
 %XCCTSP\_VOICE-3-ADDINTRFFAIL SEM2-501  
 %XCCTSP\_VOICE-3-MALLOC SEM2-501  
 %XCCTSP\_VOICE-3-NOMEM SEM2-501  
 %XCCTSP\_VOICE-3-NOSDB SEM2-502  
 %XCCTSP\_VOICE-3-NOTDMCHNL SEM2-502  
 %XCCTSP\_VOICE-3-NOVOICEVDEV SEM2-502  
 %XCCTSP\_VOICE-3-UNDEFDSX0 SEM2-502  
 %XCCTSP\_VOICE-3-UNDEFVOICEINTRF SEM2-503  
 %XCPA-3-BADHWVER SEM2-503  
 %XCPA-3-BOOTCFG SEM2-503  
 %XCPA-3-BOOTFAIL SEM2-504  
 %XCPA-3-BOOTVER SEM2-504  
 %XCPA-3-DEACTIVATED SEM2-504  
 %XCPA-3-DMAERROR SEM2-505  
 %XCPA-3-DWNLDCKSM SEM2-505  
 %XCPA-3-DWNLDFAIL SEM2-505  
 %XCPA-3-HWVER SEM2-506  
 %XCPA-3-INITFAIL SEM2-506  
 %XCPA-3-IPC SEM2-506  
 %XCPA-4-NOCLONEPARTICLES SEM2-507  
 %XCPA-3-NOTANALYZED SEM2-507  
 %XCPA-3-NOTLOADED SEM2-507  
 %XCPA-3-NOTOPER SEM2-507  
 %XCPA-3-OUTHUNG SEM2-508  
 %XCPA-3-POWEREDOFF SEM2-508  
 %XCPA-3-RXQ SEM2-508  
 %XCPA-3-STATUS SEM2-509  
 %XCPA-3-SWITCH SEM2-509  
 %XCPA-3-UCODEHDR SEM2-509  
 %XCPA-3-UCODEREAD SEM2-510  
 %XCPA-3-UCODESEC SEM2-510  
 %XCPA-3-UNEXPECTEDINT SEM2-510  
 %XCPA-3-VPLDVER SEM2-511  
 %XCPA-3-XCPADRIVERKILL SEM2-511  
 %XTAGATM-3-CONSISTENCY SEM2-511  
 %XTAGATM-3-CONTROLVC SEM2-512  
 %XTAGATM-3-CTLVCVPI SEM2-512  
 %XTAGATM-3-DUPEXTPORT SEM2-512  
 %XTAGATM-4-NEWVCINRANGE SEM2-513  
 %XTAGATM-4-OLDVCINRANGE SEM2-513  
 %XTAGATM-3-SWITCHVPI SEM2-513  
 %ADAPTER-6-BADREQUEST SEM2-523  
 %ADAPTER-6-BADSTATE SEM2-523  
 %ADAPTER-6-DIAGBEGIN SEM2-523  
 %ADAPTER-0-DIAGDATA SEM2-523  
 %ADAPTER-6-DIAGDATA2 SEM2-524  
 %ADAPTER-0-DIAGFAIL SEM2-524  
 %ADAPTER-6-DIAGFAIL2 SEM2-524  
 %ADAPTER-6-DIAGGOOD2 SEM2-524  
 %ADAPTER-6-DIAGRANGE SEM2-524  
 %ADAPTER-6-DIAGSTOP SEM2-525  
 %ADAPTER-0-DIAGTERM SEM2-525  
 %ADAPTER-6-DIAGTERM2 SEM2-525  
 %ADAPTER-0-LOADFAIL SEM2-525  
 %ADAPTER-6-LOGDATA SEM2-525  
 %ADAPTER-6-LOGOUT SEM2-526  
 %ADAPTER-6-LOGSAME SEM2-526  
 %ADAPTER-6-NO\_CHAN\_EV\_BUF SEM2-526  
 %ADAPTER-6-NO\_CHAN\_EV\_POOL SEM2-526

%ADAPTER-6-SCAN SEM2-526  
%ADAPTER-6-SCANDATA SEM2-527  
%ADAPTER-0-START\_FAIL SEM2-527  
%ADAPTER-6-WRAP SEM2-527  
%ADAPTER-6-WRAPSTOP1 SEM2-527  
%ADAPTER-6-WRAPSTOP2 SEM2-527  
%BSQ-0-INCMPLT\_XFER SEM2-529  
%BSQ-0-MTC\_CHAIN SEM2-529  
%BSQ-0-NULLREAD SEM2-529  
%BSQ-0-SCB\_CHAIN SEM2-529  
%CBUS\_ATTEN-3-BADADDR SEM2-530  
%CBUS\_ATTEN-3-DUMPUCODE SEM2-530  
%CBUS\_WRITE-3-BADTYPE SEM2-530  
%CBUS\_WRITE-3-INVALID SEM2-531  
%CBUS\_WRITE-3-MISSING SEM2-531  
%CBUS\_WRITE-3-STACK SEM2-531  
%CBUS\_WRITE-3-UNEXPECTED SEM2-531  
%CCA-3-ACR SEM2-532  
%CCA-0-BADCCA SEM2-532  
%CCA-0-BSQ\_FULL SEM2-532  
%CCA-3-BYPASS SEM2-532  
%CCA-3-CANCEL1 SEM2-533  
%CCA-3-CANCEL2 SEM2-533  
%CCA-3-COMMAND\_PATH SEM2-533  
%CCA-3-CONN\_RESULT SEM2-533  
%CCA-0-DEV\_ERR1 SEM2-534  
%CCA-0-DEV\_ERR2 SEM2-534  
%CCA-0-DEV\_ERR3 SEM2-534  
%CCA-3-DEV\_ERR4 SEM2-534  
%CCA-3-END\_STATUS SEM2-535  
%CCA-3-LOGOUT SEM2-535  
%CCA-3-REQUEST\_STATUS SEM2-535  
%CCA-3-RESET\_PATH SEM2-535  
%CCA-3-RLP1 SEM2-535  
%CCA-3-RLP2 SEM2-536  
%CCA-0-SCBNRDY SEM2-536  
%CCA-3-SEL\_RESET1 SEM2-536  
%CCA-3-SEL\_RESET2 SEM2-536  
%CCA-3-STATUS\_NOTICE SEM2-536  
%CCA-3-STATUS\_NOTICE2 SEM2-537  
%CCA-3-SYS\_RESET SEM2-537  
%CCA-0-TOOMANY SEM2-537  
%CCA-3-WRAPPLUG SEM2-537  
%CCA-0-WRITE\_FAIL SEM2-538  
%CIOS-3-BADPAK SEM2-538  
%CIOS-3-BADREFCNT SEM2-538  
%CIOS-2-BUGINF SEM2-538  
%CIOS-3-CHUNKFREE SEM2-539  
%CIOS-3-CONSISTENCY SEM2-539  
%CIOS-3-MGD\_TMR SEM2-539  
%CIOS-3-NOMEM SEM2-539  
%CIOS-3-PROC SEM2-539  
%CIOS-3-TIMERNEG SEM2-540  
%CIOS-3-WI SEM2-540  
%CLAW-0-BADAPPL SEM2-541  
%CLAW-0-BADAPPL2 SEM2-541  
%CLAW-6-BADCHAIN SEM2-541  
%CLAW-0-BADHNAME SEM2-541  
%CLAW-0-BADRSIZE SEM2-542  
%CLAW-6-BADSVR SEM2-542  
%CLAW-0-BADVERSION SEM2-542  
%CLAW-0-BADWNAME SEM2-542  
%CLAW-0-BADWSIZE SEM2-542  
%CLAW-6-COMMAND SEM2-543  
%CLAW-0-DELFAILED SEM2-543  
%CLAW-3-DELNOTHERE SEM2-543  
%CLAW-3-DELNOTME SEM2-543  
%CLAW-0-DUPMISSING SEM2-544  
%CLAW-6-INVALIDLINK SEM2-544  
%CLAW-3-IPINUSE SEM2-544  
%CLAW-6-LINKEXISTS SEM2-544  
%CLAW-6-LONGREC SEM2-545  
%CLAW-6-NOCONN SEM2-545  
%CLAW-0-NOLINKID SEM2-545  
%CLAW-3-NOMEM SEM2-545  
%CLAW-3-NOSYSVAL SEM2-545  
%CLAW-6-NOTPRESENT SEM2-546  
%CLAW-6-NOTXBUF SEM2-546  
%CLAW-6-OPTION SEM2-546  
%CLAW-6-RANGE SEM2-546  
%CLAW-6-SCBTYPE SEM2-546  
%CLAW-0-SYSMGT\_ERROR1 SEM2-547  
%CLAW-6-TOOBIG SEM2-547  
%CLAW-6-TOOSMALL SEM2-547  
%CLAW-6-TYPE SEM2-547  
%CLAW-6-UNEXPECTED SEM2-547  
%CLAW-6-VIRTCLAW SEM2-548  
%CLAW-6-WRITEREAD SEM2-548

%CMPCTG-6-ACTIVE SEM2-548  
 %CMPCTG-3-BAD\_XID3\_LEN SEM2-548  
 %CMPCTG-3-CFG\_ERR SEM2-548  
 %CMPCTG-3-CFG\_FSM\_ERR SEM2-549  
 %CMPCTG-6-INB\_SENSE SEM2-549  
 %CMPCTG-6-INIT SEM2-549  
 %CMPCTG-3-LS\_FSM\_ERR SEM2-549  
 %CMPCTG-0-NOADAP SEM2-549  
 %CMPCTG-0-NOMEM SEM2-550  
 %CMPCTG-6-NOTACTIVE SEM2-550  
 %CMPCTG-6-OUTB\_SENSE SEM2-550  
 %CMPCTG-6-REMOVED SEM2-550  
 %CMPCTG-0-SYSMGT\_ERROR3 SEM2-550  
 %CMPCTG-0-SYSMGT\_ERROR4 SEM2-551  
 %CONFIG-6-BAD\_DBTYPE SEM2-551  
 %CONFIG-3-BADFLUSH SEM2-551  
 %CONFIG-0-BADSPEED SEM2-551  
 %CONFIG-3-BADVCN SEM2-552  
 %CONFIG-3-CLAWDEV SEM2-552  
 %CONFIG-3-CONFIGINIT SEM2-552  
 %CONFIG-3-DIFFDEVT SEM2-552  
 %CONFIG-3-DOWNREV SEM2-553  
 %CONFIG-3-DUPDEV SEM2-553  
 %CONFIG-3-DUPVCN SEM2-553  
 %CONFIG-3-DUPVCN2 SEM2-553  
 %CONFIG-3-NOAPPLSPC SEM2-554  
 %CONFIG-3-NOCONFIG SEM2-554  
 %CONFIG-3-NOCUI SEM2-554  
 %CONFIG-3-NODEV SEM2-554  
 %CONFIG-3-NODEVSPC SEM2-554  
 %CONFIG-3-NOFREEPATH SEM2-555  
 %CONFIG-3-NOMEM SEM2-555  
 %CONFIG-3-NOPATHSPC SEM2-555  
 %CONFIG-3-NOSPACE SEM2-555  
 %CONFIG-3-NOVCN SEM2-555  
 %CONFIG-3-OFFLDEV SEM2-556  
 %CONFIG-3-STATEINIT SEM2-556  
 %CONFIG-3-TOOBIG SEM2-556  
 %CONFIG-3-TOOMANYDEV SEM2-556  
 %CONFIG-3-UNEXPCFG SEM2-556  
 %CONFIG-3-WORKLEFT SEM2-557  
 %CTA-6-BADCHAIN SEM2-557  
 %CTA-0-ERRSTASH SEM2-557  
 %CTA-0-ERRSTATE1 SEM2-557  
 %CTA-0-ERRSTATE2 SEM2-558  
 %CTA-0-ERRSTATE3 SEM2-558  
 %CTA-0-ERRSTATE4 SEM2-558  
 %CTA-6-FLUSH SEM2-558  
 %CTA-6-INACT\_ATTEN\_STATE SEM2-559  
 %CTA-6-INACT\_FLOW\_COUNTS SEM2-559  
 %CTA-6-INACT\_FLOW\_QUEUED SEM2-559  
 %CTA-6-INACT\_FREEMEM SEM2-559  
 %CTA-0-INACTIVE SEM2-559  
 %CTA-6-INACT\_SCBS SEM2-560  
 %CTA-6-INACT\_SLOWDOWN SEM2-560  
 %CTA-6-INIT SEM2-560  
 %CTA-6-LONGREC SEM2-560  
 %CTA-0-MSGERR1 SEM2-560  
 %CTA-0-MSGERR2 SEM2-561  
 %CTA-0-MSGERR3 SEM2-561  
 %CTA-0-NOMEM SEM2-561  
 %CTA-0-QUEUE\_ERROR SEM2-561  
 %CTA-6-SHUTDOWN SEM2-561  
 %CTA-0-SYSMGT\_ERROR1 SEM2-562  
 %CTA-0-SYSMGT\_ERROR2 SEM2-562  
 %CTA-0-SYSMGT\_ERROR3 SEM2-562  
 %CTA-0-UNEXP\_ATTEN\_EVENT SEM2-562  
 %CTA-0-UNEXP\_EVENT SEM2-562  
 %CTA-0-UNEXP\_LSI\_CMD SEM2-563  
 %CTA-0-UNEXP\_LSI\_STATUS SEM2-563  
 %DEBUGGER-0-CCHAIN SEM2-563  
 %DEBUGGER-0-CIP\_HWVINFO SEM2-564  
 %DEBUGGER-0-CIP\_SWVINFO SEM2-564  
 %DEBUGGER-3-CONSOLE\_IP SEM2-565  
 %DEBUGGER-3-CONSOLE\_TX SEM2-565  
 %DEBUGGER-0-FATAL\_ERROR SEM2-565  
 %DEBUGGER-0-INVALID\_ADDR SEM2-566  
 %DEBUGGER-0-LCORE\_DATA SEM2-566  
 %DEBUGGER-0-LCORE\_START SEM2-567  
 %DEBUGGER-0-RESTART SEM2-567  
 %DEBUGGER-0-STACK1 SEM2-568  
 %DEBUGGER-0-STACK2 SEM2-568  
 %DEBUGGER-0-STACK3 SEM2-569  
 %DEBUGGER-0-STACK4 SEM2-569  
 %DEBUGGER-0-STACK\_DATA1 SEM2-570  
 %DEBUGGER-0-STACK\_DATA2 SEM2-570  
 %DEBUGGER-0-STACK\_DATA3 SEM2-571  
 %DEBUGGER-0-STACK\_DATA4 SEM2-571

%DEBUGGER-0-STACK\_DATA5 SEM2-572  
%DEBUGGER-0-STACK\_DATA6 SEM2-572  
%DEBUGGER-0-STACK\_DATA7 SEM2-573  
%DEBUGGER-0-STACK\_DATA8 SEM2-573  
%DEBUGGER-0-STACK\_DUMP0 SEM2-574  
%DEBUGGER-0-STACK\_DUMP1 SEM2-574  
%DEBUGGER-0-STACK\_OVERFLOW SEM2-575  
%DEBUGGER-0-STACK\_START SEM2-575  
%DEBUGGER-0-TRACE\_ADDR SEM2-576  
%DEBUGGER-0-TRACE\_DATA SEM2-576  
%DEBUGGER-0-TRACE\_START SEM2-577  
%DIAG-6-BADCODE SEM2-579  
%DIAG-6-BADLOAD SEM2-579  
%DMA-0-BADFIFO SEM2-579  
%DMA-3-BADXFER SEM2-580  
%DMA-3-CBUSERR SEM2-580  
%DMA-3-CBUSPARITY SEM2-580  
%DMA-4-DATAPARITY SEM2-580  
%DMA-3-DMAFAIL SEM2-581  
%DMA-0-INCOMPL SEM2-581  
%DMA-3-LOGICERR SEM2-581  
%DMA-0-NOXFER SEM2-581  
%DMA-0-REGISTERS SEM2-582  
%GET\_DATA-0-NOMEMORY SEM2-582  
%GT64011-2-ERROR\_INT SEM2-582  
%GT64011-2-ERROR\_REGS SEM2-583  
%GT64011-2-UNKNOWN\_ID SEM2-583  
%INT-0-ADDFAST SEM2-583  
%INT-0-ADDFLIH SEM2-583  
%INT-0-ADDFULL SEM2-584  
%INT-0-ADDTRAP SEM2-584  
%INT-0-REMOVEFAST SEM2-584  
%INT-0-REMOVEFLIH SEM2-584  
%INT-0-REMOVEFULL SEM2-584  
%INT-0-REMOVETRAP SEM2-585  
%IPC-2-CANT\_SEND SEM2-585  
%IPC-4-CONSISTENCY SEM2-585  
%IPC-3-DELETED SEM2-585  
%IPC-3-GIANT SEM2-586  
%IPC-2-LOCK SEM2-586  
%IPC-3-NOBUFF SEM2-586  
%IPC-5-NODELFUNC SEM2-586  
%IPC-2-NODISPATCH SEM2-587  
%IPC-2-NOMEM SEM2-587  
%IPC-2-ONINT SEM2-587  
%IPC-5-SLAVELOG SEM2-587  
%IPC-1-TNIPC\_CALLBACK SEM2-588  
%IPC-1-TNIPC\_RPC SEM2-588  
%IPC-2-UNLOCK SEM2-588  
%IPC\_DRVR-2-DMAERR SEM2-588  
%IPC\_DRVR-4-NOMEM SEM2-589  
%IPP-3-PKT\_EXCEEDS\_MTU SEM2-589  
%LOADER-3-ABSERR SEM2-589  
%LOADER-3-ALOCER1 SEM2-589  
%LOADER-3-ALOCER2 SEM2-590  
%LOADER-3-ATFERR SEM2-590  
%LOADER-3-BADSHT SEM2-590  
%LOADER-3-BADVERS SEM2-590  
%LOADER-3-BAKEXP SEM2-590  
%LOADER-3-BIGEND SEM2-591  
%LOADER-3-BINDERR SEM2-591  
%LOADER-3-COMERR SEM2-591  
%LOADER-3-COMMIX SEM2-591  
%LOADER-3-COMPER SEM2-591  
%LOADER-3-DREADE SEM2-592  
%LOADER-3-DUPEXP SEM2-592  
%LOADER-3-EIDENT SEM2-592  
%LOADER-3-ELF32 SEM2-592  
%LOADER-3-ELFH SEM2-592  
%LOADER-3-ERR16H SEM2-593  
%LOADER-3-ERR16M SEM2-593  
%LOADER-3-ERRCNR SEM2-593  
%LOADER-3-FCLOSE SEM2-593  
%LOADER-3-FILESIZE SEM2-593  
%LOADER-3-FOPEN SEM2-594  
%LOADER-3-FOPENBZ SEM2-594  
%LOADER-3-FOPENER SEM2-594  
%LOADER-3-FREADE SEM2-594  
%LOADER-3-GPPROB SEM2-594  
%LOADER-3-GRADE SEM2-595  
%LOADER-3-HDRSIZ SEM2-595  
%LOADER-3-HDRVER SEM2-595  
%LOADER-0-HEADER SEM2-595  
%LOADER-3-HILO16MX SEM2-595  
%LOADER-3-HREADE SEM2-596  
%LOADER-3-INSUFF SEM2-596  
%LOADER-0-INVALIDIOS SEM2-596  
%LOADER-6-LOADING SEM2-596

%LOADER-0-LOADMAP\_DATA1 SEM2-596  
 %LOADER-0-LOADMAP\_DATA2 SEM2-597  
 %LOADER-0-LOADMAP\_DATA3 SEM2-597  
 %LOADER-0-LOADMAP\_EMPTY1 SEM2-597  
 %LOADER-0-LOADMAP\_EMPTY2 SEM2-597  
 %LOADER-0-LOADMAP\_HEAD0 SEM2-597  
 %LOADER-0-LOADMAP\_HEAD1 SEM2-598  
 %LOADER-3-LOADRC SEM2-598  
 %LOADER-3-MAXRSE SEM2-598  
 %LOADER-3-MAXSEC SEM2-598  
 %LOADER-3-MAXSTRT SEM2-598  
 %LOADER-3-MAXSYMT SEM2-599  
 %LOADER-3-NOBITS0 SEM2-599  
 %LOADER-3-NODSO SEM2-599  
 %LOADER-3-NOELF SEM2-599  
 %LOADER-3-NOERES SEM2-599  
 %LOADER-3-NOPREFIX SEM2-600  
 %LOADER-3-NOPRG SEM2-600  
 %LOADER-3-NOSECH SEM2-600  
 %LOADER-3-NOSO SEM2-600  
 %LOADER-3-NOTRE SEM2-600  
 %LOADER-3-NOVERS SEM2-601  
 %LOADER-3-READERR SEM2-601  
 %LOADER-3-RELFLG SEM2-601  
 %LOADER-3-RELREAD SEM2-601  
 %LOADER-3-RELTYP SEM2-601  
 %LOADER-3-RELTYP2 SEM2-602  
 %LOADER-3-RESERR SEM2-602  
 %LOADER-3-SECERR SEM2-602  
 %LOADER-3-SEEKER SEM2-602  
 %LOADER-3-SHFLAGE SEM2-602  
 %LOADER-3-SHNHIPE SEM2-603  
 %LOADER-3-SHNHIR SEM2-603  
 %LOADER-3-SIZERR1 SEM2-603  
 %LOADER-3-SORBER SEM2-603  
 %LOADER-3-SREADE SEM2-603  
 %LOADER-3-SREADS SEM2-604  
 %LOADER-3-STOTHER SEM2-604  
 %LOADER-3-STREXE SEM2-604  
 %LOADER-3-SUNDERR SEM2-604  
 %LOADER-3-SYMEXE SEM2-604  
 %LOADER-3-SYRERR SEM2-605  
 %LOADER-3-TSHSIZ SEM2-605  
 %LOADER-3-TYPERR SEM2-605  
 %LOADER-3-USRERR SEM2-605  
 %LOADER-3-VARHIP SEM2-605  
 %LOADER-3-VARLOP SEM2-606  
 %LOVE-3-LOVELETTER SEM2-606  
 %LOVE-3-NOMEM SEM2-606  
 %MBUF-0-MFREEx2 SEM2-606  
 %MBUF-0-PANIC SEM2-607  
 %MEMD-3-BADIPC SEM2-607  
 %MEMD-3-BADPTR SEM2-607  
 %MEMD-3-BADVCN SEM2-608  
 %MEMD-3-FRAME\_DATA1 SEM2-608  
 %MEMD-3-FRAME\_DATA2 SEM2-608  
 %MEMD-3-FRAME\_START SEM2-608  
 %MEMD-3-VCNREGISTER SEM2-609  
 %MEMD-3-VCNREGISTER SEM2-609  
 %MEMD-3-WRONGINT SEM2-609  
 %MPC-3-BAD\_CONFIG\_CODE SEM2-609  
 %MPC-3-BAD\_CONFIG\_DIR SEM2-610  
 %MPC-6-BAD\_DIRECTION SEM2-610  
 %MPC-3-BAD\_DLC\_CMD SEM2-610  
 %MPC-3-BAD\_FLAGS SEM2-610  
 %MPC-3-BAD\_HDR SEM2-610  
 %MPC-3-BAD\_INB\_BFR SEM2-611  
 %MPC-3-BLOCK\_SEQ\_ERROR SEM2-611  
 %MPC-3-CFG\_TYPE\_ERR SEM2-611  
 %MPC-3-CMPCP\_ACT\_ERR SEM2-611  
 %MPC-3-CMPCP\_BLK\_FMT\_ERR SEM2-611  
 %MPC-6-CMPCP\_CONN\_ACT SEM2-612  
 %MPC-6-CMPCP\_CONN\_INACT SEM2-612  
 %MPC-3-CMPCP\_CV\_ERR1 SEM2-612  
 %MPC-3-CMPCP\_CV\_ERR2 SEM2-612  
 %MPC-3-CMPCP\_CV\_ERR3 SEM2-612  
 %MPC-3-CMPCP\_CV\_LEN\_ERR SEM2-613  
 %MPC-6-CMPCP\_CV\_LOG SEM2-613  
 %MPC-3-CMPCP\_DUPL\_TOKEN SEM2-613  
 %MPC-3-CMPCP\_FRAME\_ERR1 SEM2-613  
 %MPC-3-CMPCP\_FRAME\_ERR2 SEM2-613  
 %MPC-3-CMPCP\_HANDLE\_ERR SEM2-614  
 %MPC-3-CMPCP\_INACT\_ERR SEM2-614  
 %MPC-3-CMPCP\_PROT\_ERR SEM2-614  
 %MPC-6-CMPCP\_STALE\_TOKEN SEM2-614  
 %MPC-3-CMPCP\_TOKEN\_ERR SEM2-614  
 %MPC-3-CMPCP\_TOKEN\_LEN\_ERR SEM2-615  
 %MPC-3-CONFIG\_ERR SEM2-615

%MPC-3-CV\_CMGR\_FSM\_ERR SEM2-615  
%MPC-3-CV\_PROT\_FSM\_ERR SEM2-615  
%MPC-6-INIT SEM2-615  
%MPC-3-LENGTH\_ERR SEM2-616  
%MPC-6-LENGTH\_ERR\_DATA SEM2-616  
%MPC-6-LENGTH\_ERR\_INFO SEM2-616  
%MPC-6-LINK\_CONFIGURED SEM2-616  
%MPC-6-NODE\_NOT\_ACTIVE SEM2-616  
%MPC-0-NOMEM SEM2-617  
%MPC-3-PARTNER\_CFG\_ERR SEM2-617  
%MPC-3-PARTNER\_FSM\_ERR SEM2-617  
%MPC-6-SEQ\_NUM\_WRAP SEM2-617  
%MPC-6-SHUTDOWN SEM2-617  
%MPC-3-SUBCH\_FSM\_ERR SEM2-618  
%MPC-3-SWEEP\_FSM\_ERR SEM2-618  
%MPC-3-SWEEP\_SEQ\_ERROR SEM2-618  
%MPC-0-SYSMGT\_ERROR1 SEM2-618  
%MPC-0-SYSMGT\_ERROR2 SEM2-618  
%MPC-0-SYSMGT\_ERROR3 SEM2-619  
%MPC-0-SYSMGT\_ERROR4 SEM2-619  
%MPC-6-TOO\_MANY\_TGS SEM2-619  
%MPC-3-XID2\_BAD\_DATA SEM2-619  
%MPC-3-XID2\_BAD\_HDR SEM2-619  
%MPC-3-XID2\_FSM\_ERR SEM2-620  
%MSG802-3-ADAPTER\_LIMIT\_EXCEEDED SEM2-620  
%MSG802-6-ADAPTER\_OPEN SEM2-620  
%MSG802-6-ADAPTER\_REM SEM2-620  
%MSG802-6-ADAPTER\_UPD SEM2-620  
%MSG802-6-BADNS\_WARN SEM2-621  
%MSG802-6-CTASET\_FAIL SEM2-621  
%MSG802-6-DMA\_ABORT SEM2-621  
%MSG802-6-FLOW\_OFF\_COUNT SEM2-621  
%MSG802-6-FLOW\_OFF\_INFO SEM2-622  
%MSG802-6-FLOW\_OFF\_TERM SEM2-622  
%MSG802-6-FRAMESZ\_EXCEEDED SEM2-622  
%MSG802-3-HARD\_ERROR SEM2-622  
%MSG802-3-INVALID\_CFGCMD SEM2-622  
%MSG802-6-INVALID\_ID SEM2-623  
%MSG802-3-INVALID\_MSICMD SEM2-623  
%MSG802-6-INVALID\_PRIMITIVE SEM2-623  
%MSG802-3-INVALID\_VCN1 SEM2-623  
%MSG802-3-INVALID\_VCN2 SEM2-623  
%MSG802-6-LLC\_DUP\_CCB SEM2-624  
%MSG802-6-LLC\_DUP\_SAP SEM2-624  
%MSG802-6-LLC\_SHUT SEM2-624  
%MSG802-6-LLC\_START SEM2-624  
%MSG802-6-MAX\_FAILED SEM2-624  
%MSG802-6-MAX\_FAILED2 SEM2-625  
%MSG802-6-MAX\_LLC\_EXCEEDED SEM2-625  
%MSG802-6-NOMEM SEM2-625  
%MSG802-3-QUEUE\_OPEN SEM2-625  
%MSG802-3-RESOURCE\_DEPLETED SEM2-625  
%MSG802-6-SHRINK\_CONN SEM2-626  
%MSG802-6-SHUT\_IN\_PROG SEM2-626  
%MSG802-6-START802\_FAILED SEM2-626  
%MSG802-6-THRESHOLD SEM2-626  
%MSG802-3-UNKNOWN\_EVENT SEM2-626  
%MSG802-3-UNSUPPORTED SEM2-627  
%NEVADA-0-BADADD SEM2-627  
%NEVADA-0-BADDISABLE SEM2-627  
%NEVADA-0-BADENABLE SEM2-628  
%NEVADA-0-BADENABLE2 SEM2-628  
%NEVADA-0-BADINT SEM2-628  
%NEVADA-0-BADREMOVE SEM2-628  
%OFFL-6-ALIASNOTFOUND SEM2-629  
%OFFL-4-BADDESC SEM2-629  
%OFFL-0-BADSCB SEM2-629  
%OFFL-3-BADSEQ SEM2-630  
%OFFL-6-COMMAND SEM2-630  
%OFFL-6-DUPALIAS SEM2-630  
%OFFL-7-HEX16B SEM2-630  
%OFFL-7-HEX4W SEM2-631  
%OFFL-3-ILLALD SEM2-631  
%OFFL-3-ILLALH SEM2-631  
%OFFL-3-ILLEN SEM2-632  
%OFFL-0-ILLFREE1 SEM2-632  
%OFFL-0-ILLFREE2 SEM2-632  
%OFFL-3-ILLNUM SEM2-633  
%OFFL-3-ILLRST SEM2-633  
%OFFL-6-LONGREC SEM2-633  
%OFFL-3-MISRST SEM2-633  
%OFFL-0-NOMBUF SEM2-634  
%OFFL-3-NOMEM SEM2-634  
%OFFL-3-NOMEMSOCK SEM2-634  
%OFFL-3-NOMEMT SEM2-634  
%OFFL-0-NOPEND SEM2-635  
%OFFL-6-OFFLNOTFOUND SEM2-635  
%OFFL-3-PENDREQ SEM2-635



%OFFL-3-REGERR SEM2-635  
 %OFFL-3-REQFORM SEM2-636  
 %OFFL-3-REQLEN SEM2-636  
 %OFFL-3-REQTYPE SEM2-636  
 %OFFL-4-SENDERR SEM2-636  
 %OFFL-4-SOCLEFT SEM2-637  
 %OFFL-6-SOCREQ SEM2-637  
 %OFFL-6-TOOMANYALIASES SEM2-637  
 %OFFL-6-TRDISA SEM2-637  
 %OFFL-6-TRENAB SEM2-638  
 %OFFL-4-TRRESU SEM2-638  
 %OFFL-4-TRSUSP SEM2-638  
 %OFFL-6-UNEXP SEM2-638  
 %OFFL-6-VIRTOFFL SEM2-639  
 %OFFL-6-WRCHAIN SEM2-639  
 %OFFL-6-WRITEREAD SEM2-639  
 %OFFL-0-WRONGFREE SEM2-639  
 %PACK-3-BADLEN SEM2-640  
 %PACK-3-BADSCBQ SEM2-640  
 %PACK-0-BADSIZE SEM2-640  
 %PACK-0-BADSIZE2 SEM2-640  
 %PACK-3-BADSTATE SEM2-641  
 %PACK-0-BADTYPE SEM2-641  
 %PACK-0-BADTYPE2 SEM2-641  
 %PACK-0-BADVERSION SEM2-641  
 %PACK-6-COMMAND SEM2-641  
 %PACK-6-CTLERROR SEM2-642  
 %PACK-3-ILLEN SEM2-642  
 %PACK-3-ILLEN2 SEM2-642  
 %PACK-6-NOCONN SEM2-642  
 %PACK-0-NOLINKID SEM2-642  
 %PACK-3-NOMBUF SEM2-643  
 %PACK-3-NOMORE SEM2-643  
 %PACK-6-NOTPRESENT SEM2-643  
 %PACK-6-RANGE SEM2-643  
 %PACK-6-RANGE2 SEM2-643  
 %PACK-0-SYSMGT\_ERROR1 SEM2-644  
 %PACK-0-SYSMGT\_ERROR2 SEM2-644  
 %PACK-3-TOOBIG SEM2-644  
 %PACK-3-TOOLARGE SEM2-644  
 %PKTS-3-BUFLEN SEM2-645  
 %PKTS-3-CONSISTENCY SEM2-645  
 %PKTS-3-INIT SEM2-645  
 %PKTS-3-NOSUPP SEM2-645  
 %PKTS-3-NOTREADY SEM2-646  
 %PKTS-3-SEGMENT SEM2-646  
 %SCB-6-BADSCB SEM2-646  
 %SCB-6-RESUME SEM2-646  
 %SCB-6-WAIT SEM2-647  
 %SCHED-0-BADPRIORITY SEM2-647  
 %SCHED-0-INVLOCK1 SEM2-647  
 %SCHED-0-INVLOCK2 SEM2-648  
 %SCHED-0-NMLDATA SEM2-648  
 %SCHED-0-NOLOCK SEM2-648  
 %SCHED-0-NOPROCID SEM2-648  
 %SCHED-0-NOSTACK SEM2-649  
 %SCHED-0-NOTCB SEM2-649  
 %SCHED-0-NOTMYLOCK SEM2-649  
 %SCHED-0-NOTPROCES SEM2-649  
 %SLC-3-PCANMIRESET SEM2-650  
 %SLC-3-SCANEP1 SEM2-650  
 %SLC-3-SCANEP2 SEM2-650  
 %SLC-3-SCANSLC SEM2-650  
 %SLC-3-STOPBIDITO SEM2-651  
 %SLC-3-STOPEPTO SEM2-651  
 %SLCI-3-BAD\_TYPE\_CODE SEM2-651  
 %SLCI-6-FLUSH SEM2-651  
 %SLCI-3-INBOUND\_FSM\_ERR SEM2-652  
 %SLCI-3-INFLOW\_FSM\_ERR SEM2-652  
 %SLCI-6-LONGREC SEM2-652  
 %SLCI-0-NOMEM SEM2-652  
 %SLCI-0-STASH\_EMPTY SEM2-652  
 %SSI802-6-DUMP SEM2-653  
 %SSI802-3-FATAL\_ERROR SEM2-653  
 %SSI802-3-RTN\_ADR SEM2-653  
 %SUBSYS-2-BADCLASS SEM2-653  
 %SUBSYS-2-BADSEQUENCE SEM2-654  
 %SUBSYS-2-BADVERSION SEM2-654  
 %SUBSYS-2-MAXRECUR SEM2-654  
 %SUBSYS-2-MISMATCH SEM2-654  
 %SUBSYS-2-NOTFOUND SEM2-654  
 %SYS-3-BADBLOCK SEM2-655  
 %SYS-3-BADFREEMAGIC SEM2-655  
 %SYS-3-BADFREEPTRS SEM2-655  
 %SYS-3-BADMAGIC SEM2-655  
 %SYS-2-BADSHARE SEM2-656  
 %SYS-6-BLKINFO SEM2-656  
 %SYS-3-CACHE\_DIRTY\_ADR SEM2-656

%SYS-6-CACHE\_DIRTY\_MSG SEM2-656  
%SYS-3-CACHED\_PAGE\_ADR SEM2-656  
%SYS-2-FREEBAD SEM2-657  
%SYS-2-FREEFREE SEM2-657  
%SYS-3-INUSEFREE SEM2-657  
%SYS-3-INVMEMINT SEM2-657  
%SYS-2-LOWMEM SEM2-657  
%SYS-2-MEMTOOSMALL SEM2-658  
%SYS-6-MTRACE SEM2-658  
%SYS-2-NOMEMFRG SEM2-658  
%SYS-2-NOMEMORY SEM2-658  
%SYS-3-NZREFCNT SEM2-658  
%SYS-3-OVERRUN SEM2-659  
%SYS-5-RELOAD SEM2-659  
%SYS-5-RESTART SEM2-659  
%SYS-3-WRONGFREELIST SEM2-659  
%SYSMGT\_EVENT-4-ERROR SEM2-659  
%SYSMGT\_RPC-3-ERROR SEM2-660  
%SYSMGT\_RPC-3-IPC\_ERROR SEM2-660  
%SYSMGT\_RPC-3-NOMEM SEM2-660  
%SYSMGT\_RPC-6-STATE\_CHANGE SEM2-660  
%SYSMGT\_RPC-4-UNKNOWN SEM2-661  
%TCPIP-0-PANIC SEM2-661  
%TN3270S-1-ADJUST\_POOL\_FAILED SEM2-661  
%TN3270S-6-AVL\_INSERT\_FAILED SEM2-662  
%TN3270S-6-BADCIRCBUF SEM2-662  
%TN3270S-4-BAD\_MAX\_LUS\_CFG SEM2-662  
%TN3270S-6-BADTIMER SEM2-662  
%TN3270S-6-CONFLICTING\_LU\_SEEDS SEM2-662  
%TN3270S-1-CREATE\_MUXWAIT\_FAILED SEM2-663  
%TN3270S-1-CREATE\_POOL\_FAILED SEM2-663  
%TN3270S-1-CREATE\_THREAD\_FAILED SEM2-663  
%TN3270S-4-DDDLU\_NOT\_SUPPORTED SEM2-663  
%TN3270S-1-DNS\_NAIL\_LOOKUP\_FAILED SEM2-664  
%TN3270S-1-DNS\_NAIL\_NO\_SERVER SEM2-664  
%TN3270S-1-DNS\_NAIL\_NOT\_FOUND SEM2-664  
%TN3270S-1-DNS\_NAIL\_QUERY\_TIMED\_OUT SEM2-664  
%TN3270S-1-DNS\_NAIL\_QUEUE\_ERROR SEM2-664  
%TN3270S-1-DNS\_NAIL\_SERVER\_UNREACHABLE SEM2-665  
%TN3270S-4-FUNC\_NEGOT\_LOOP SEM2-665  
%TN3270S-0-ILLEGAL\_CCMutex\_RELEASE SEM2-665  
%TN3270S-4-ILLEGAL\_SUBOPTION SEM2-665  
%TN3270S-6-INVALID\_RESOURCE\_LENGTH SEM2-665  
%TN3270S-1-LISTENFAIL SEM2-666  
%TN3270S-2-LOW\_MEM SEM2-666  
%TN3270S-1-LU\_ERROR SEM2-666  
%TN3270S-1-LU\_ERROR\_INFO SEM2-666  
%TN3270S-1-LU\_NO\_BUFFER SEM2-667  
%TN3270S-6-LU\_THRESHOLD SEM2-667  
%TN3270S-1-MEMORY\_SHORTAGE SEM2-667  
%TN3270S-1-NAIL\_NOT\_FOUND SEM2-667  
%TN3270S-1-NegRsp\_NO\_CORRELATOR SEM2-667  
%TN3270S-3-NO\_BIND\_REQ\_RCVD SEM2-668  
%TN3270S-3-NO\_DYN\_ACTLU\_REQ\_RCVD SEM2-668  
%TN3270S-1-NO\_EVENT\_BUFS SEM2-668  
%TN3270S-1-NO\_LU\_MEMORY SEM2-668  
%TN3270S-4-NO\_LU\_SESSIONS SEM2-669  
%TN3270S-1-NO\_NAIL\_MEMORY SEM2-669  
%TN3270S-6-NON\_E\_IPADDR\_ELEMENT\_NOT\_FOUND SEM2-669  
%TN3270S-3-NO\_NOTIFY\_AV\_RSP\_RCVD SEM2-669  
%TN3270S-3-NO\_NOTIFY\_UA\_RSP\_RCVD SEM2-670  
%TN3270S-3-NO\_PSID\_RSP\_RCVD SEM2-670  
%TN3270S-3-NO\_SDT\_REQ\_RCVD SEM2-670  
%TN3270S-3-NO\_SDT\_TMARK\_RCVD SEM2-671  
%TN3270S-6-NOSESSHNDL SEM2-671  
%TN3270S-3-NO\_TERMSELF\_RSP\_RCVD SEM2-671  
%TN3270S-3-NO\_UNBIND\_RSP\_RCVD SEM2-672  
%TN3270S-3-NO\_UNBIND\_TMARK\_RCVD SEM2-672  
%TN3270S-6-NOWRBUFR SEM2-672  
%TN3270S-6-PARAMETERINIT SEM2-672  
%TN3270S-1-POOL\_NOT\_FOUND SEM2-673  
%TN3270S-1-PROFILE\_NOT\_FOUND SEM2-673  
%TN3270S-1-RESOURCE\_POOL\_NOT\_FOUND SEM2-673  
%TN3270S-1-RP\_PU\_CONFLICT SEM2-673  
%TN3270S-1-RP\_RTGROUP\_CONFLICT SEM2-673  
%TN3270S-4-SESSION\_NEGOT\_TIME\_EXPIRED SEM2-674  
%TN3270S-1-SNA\_BAD\_SEQUENCE SEM2-674  
%TN3270S-1-SNA\_BAD\_WSF SEM2-674  
%TN3270S-1-SNA\_NO\_PU\_RESPONSE SEM2-674  
%TN3270S-4-SO\_SNDBUF\_FAILED SEM2-674  
%TN3270S-1-START\_FAIL SEM2-675  
%TN3270S-6-START\_OK SEM2-675  
%TN3270S-1-STARTUP\_RACE SEM2-675  
%TN3270S-6-STOPPING SEM2-675  
%TN3270S-2-TELNETINITFAIL SEM2-675  
%TN3270S-4-TN3270\_CONFIG\_INCOMPATIBLE SEM2-676

%TN3270S-6-TOOBIG SEM2-676  
%TN3270S-4-TOO\_MANY\_HOST\_WRITES SEM2-676  
%TN3270S-7-UNKNOWN\_SNA\_MSG SEM2-676  
%TN3270S-6-UNSUPPORTED\_FUNCTIONALITY SEM2-676  
%TN3270S-6-UNSUPPORTED\_LU\_DELETION\_OPTION  
SEM2-677  
%UTIL-3-LINKLIST SEM2-677  
%XCPA-3-CKSUM\_OFFSET SEM2-677  
%XCPA-2-MBX SEM2-678  
%XCPA-3-NOMEMORY SEM2-678  
%XCPA-2-PMC\_TIMEOUT SEM2-678  
%XCPA-3-SWVER\_MISMATCH SEM2-678

