S4T68360 Error Messages

S4T68360 error messages relate to the 4-port synchronous serial adapter based on the 68360 processor.

Error Message

```
%S4T68360-1-DISCOVER: only found [dec] interfaces on bay [dec],
shutting down bay
```

Explanation   A port adaptor hardware error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

```
%S4T68360-1-DWNLDFL: s4t_msg_download_fail
```

Explanation   The S4T hardware has failed. It could not download its operational microcode.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

```
%S4T68360-1-DWNLDCKSM: s4t_msg_cksm_fail
```

Explanation   The download of the internal firmware to the S4T failed to checksum correctly. This usually indicates a hardware failure of the S4T or the Versatile Interface Processor (VIP).

Recommended Action   Perform a power cycle. If the problem persists, the S4T hardware may have a problem.

Error Message
```
%S4T68360-1-INITFAIL: s4t_msg_initfail
```

Explanation The S4T port adaptor failed to complete hardware initialization.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%S4T68360-3-MBXREAD: s4t_msg_mbxread
```

Explanation The S4T has not responded to a message from the Versatile Interface Processor (VIP) within a specified time.

Recommended Action Perform a microcode reload of the VIP. If the problem persists, it indicates that the S4T or VIP hardware failed.

Error Message
```
%S4T68360-1-NOTCMPLT: s4t_msg_download_ncmplt
```

Explanation The S4T port adaptor hardware failed. It did not acknowledge the completion of the operational microcode download.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%S4T68360-1-NOTREADY: s4t_msg_notready
```

Explanation The S4T port adaptor hardware failed. The S4T port adaptor would not begin to download the operational microcode.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

`%S4T68360-3-NOTS4T68360: At [hex], device reported [hex]`

Explanation The S4T hardware failed. A non-S4T device pointed at the software for the S4T.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

`%S4T68360-3-OWNERR: msgtxt_ownerror`

Explanation A software or hardware error occurred. The S4T driver detected that the transmit ring is an inconsistent and unrecoverable state.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

`%S4T68360-3-PANIC: s4t_msg_panic`

Explanation The S4T firmware detected an illegal or unexpected CPU exception or condition. This may be caused by a software error or by a hardware failure.

Recommended Action Perform a microcode reload of the Versatile Interface Processor (VIP). If the problem persists, it indicates that the S4T hardware failed.

Error Message

`%S4T68360-1-STARTFAIL: s4t_msg_startfail`

Explanation A software or hardware error occurred. The S4T interface is not responding to commands used to initialize it.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%S4T68360-1-STOPFAIL: s4t_msg_stopfail);
```

Explanation   The S4T port adaptor failed to respond to a request to disable an interface.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%S4T68360-3-TOOSMALL: s4t_msg_toosmall
```

Explanation   An output packet was detected that was smaller than the minimum allowable datagram size. An error in another driver or an error in the system software probably triggered this error message.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

SCHED Error Messages

Scheduler error messages

Error Message

```
%SCHED-2-ATTRCMD: Attempt to [chars] attribute [chars] on process
[dec]., 30*ONESEC
```

```
%SCHED-2-ATTRVALUE: Attempt to set bad [chars] value ([hex]) on
process [dec].
```

```
%SCHED-2-EDISMSCRIT: Critical priority process [chars] may not
dismiss., 30*ONESEC
```

```
%SCHED-3-LOSTWAKEUP: Wakeup information for process [chars] lost
(maj [hex], min [hex])., 30*ONESEC
```

```
%SCHED-2-NOATTR: Attempt to [chars] unknown process attribute
[dec]., 30*ONESEC
```

```
%SCHED-2-NOTWATCHTIMER: [chars] timer [hex] not being watched.,
30*ONESEC
```

```
%SCHED-3-PAGEZERO: Low memory modified by [chars] ([hex] = [hex]).
```

Explanation   A software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
%SCHED-3-PRIORITY: Illegal priority ([dec]) specified for process
[chars]., 30*ONESEC

%SCHED-2-QUEUENOTEMPTY: Attempt to delete non-empty watched queue
[chars] (address [hex])., 30*ONESEC

%SCHED-2-SEMUNLOCK: [chars] attempted to unlock semaphore owned by
[chars], 30*ONESEC

%SCHED-3-STACKSIZE: Illegal stack size ([dec]) specified for process
[chars]., 30*ONESEC

%SCHED-3-STUCKMTMR: Sleep w/expired mgd timer [hex], time %#Ta (%TE
ago)., ONEMIN

Explanation   A software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your
technical support representative.

Error Message
%SCHED-3-STILLWATCHING: Process still watching [chars] [chars].

Explanation   An internal software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your
technical support representative.

Error Message
%SCHED-3-STILLWATCHINGT: Process still watching [chars] timer [hex].

Explanation   An internal software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your
technical support representative.

Error Message
```
%SCHED-3-STUCKTMR: Sleep w/expired timer [hex], time %#Ta (%TE
ago)., ONEMIN
```

Explanation   An internal software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SCHED-3-THRASHING: Process thrashing on watched [chars]., ONEMIN
```

Explanation   A hardware or software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SCHED-3-UNEXPECTEDEVENT: Process received unknown event (maj [hex],
min [hex])., 30*ONESEC
```
```
%SCHED-3-UNEXPECTEDMESSAGE: Unknown message [hex] received (ptr arg
[hex], num arg [hex])., 30*ONESEC
```
```
%SCHED-3-UNEXPECTEDQUEUE: Queue event for unknown queue (index
[dec])., 30*ONESEC
```
```
%SCHED-3-UNEXPECTEDTIMER: Unknown timer expiration, timer = [hex],
type [dec], 10 * ONESEC
```
```
%SCHED-2-WATCH: Attempt to [chars] uninitialized watched [chars]
(address [hex])., 30*ONESEC
```
```
%SCHED-2-WATCHTIMER: Request to watch [chars] timer [hex] ([chars]
timer [hex] active)., 30*ONESEC
```

Explanation   A software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

SDLC Error Messages

Synchronous Data Link Control error messages

Error Message
```
%SDLC-6-BADFRAME: [chars], Received bad SDLC [chars]frame, address
[hex], control [hex] , 30*ONESEC
```

Explanation   A hardware or software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SDLC-5-CONFIGERR: [chars], addr [hex], Sent SNRM, received SNRM.
Check link station roles., 20*ONESEC
```

Explanation   A hardware or software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SDLC-4-CTRLBAD: Interface [chars], Invalid control field
```

Explanation   A bad SDLC frame was received.

Recommended Action   If this message recurs, check the SDLC serial line and the devices attached to it.

Error Message
```
%SDLC-3-DLU_ERROR: [chars], DLU failed to close station [hex] before
re-opening, [chars]/[chars], ONESEC
```

Explanation   A hardware or software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

`%SDLC-4-DROPPED: Dropped SDLC packet from SDLC hold queue, 10`

Explanation An SDLC frame had to be dropped from the output hold queue, usually because of excessive congestion on the output link.

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

Error Message

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

Explanation A FRMR frame was received. This can be due to a noisy serial line, an overloaded SDLC device, or corrupted data.

Recommended Action If this message recurs, service the serial line and the devices attached to it.

Error Message

`%SDLC-2-ILLEGSTATE: Illegal state, [hex] [dec]`

Explanation An internal SDLC state violation was detected.

Recommended Action Record the entire error message and call your technical support representative for assistance.

Error Message

`%SDLC-4-INFOBAD: Interface [chars], Info field not permitted`

`%SDLC-4-INVNR: Interface [chars], Invalid NR value`

Explanation A bad SDLC frame was received.

Recommended Action If any of these messages recur, check the SDLC serial line and the devices attached to it.

Error Message
```
%SDLC-5-INVLDGRPCFG: Interface [chars], ignoring group-poll
mismatch, UPOLL [hex], 60*ONEMIN
```

Explanation   A hardware or software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SDLC-4-INVLDGRPPOLL: Interface [chars], Invalid group-poll frame,
10
```

Explanation   An unnumbered poll (UP) was received with the wrong group poll address.

Recommended Action   Make sure the group poll address configured on the router matches the one configured in the physical unit (PU) macro (GP3174=XX) in the Network Control Program (NCP) generate file.

Error Message
```
%SDLC-5-INVLDGRPPOLL: Interface [chars], not configured for
group-poll frame, received [hex], 60*ONEMIN
```

Explanation   A hardware or software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SDLC-4-N1TOOBIG: Interface [chars], N1 too large
```

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

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

Error Message
`%SDLC-2-NOBUF: Interface [chars], no buffer available to [chars]`

Explanation Insufficient memory available.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

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

Explanation The router needed to generate an FRMR frame but could not allocate the necessary memory for the frame.

Recommended Action The fact that memory is so low that it cannot allocate the frame is far more serious than the reason for generating the FRMR. Fix the cause of low memory, and if the problem still occurs, determine why the FRMR must be sent.

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

Explanation This is a software error. A frame was given to the SDLC handler to process, but the interface on which the frame arrived is not known.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
`%SDLC-2-NOPOINTER: AW_SDLC_SEC with no sdllc_llc pointer`

Explanation An error condition occurred during SDLLC initiation.

Recommended Action No action is required. The SDLLC session will restart without operator intervention.

Error Message
`%SDLC-4-NOUA: Interface [chars], address [hex] non UA frame is`
`received in response to SNRM, 99999`

Explanation   The router 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 occurred in the router's SDLC processing system.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
`%SDLC-4-SDLC_ERR: SDLC_ERROR with no poll`

Explanation   A protocol error was detected on a secondary station, but FRMR could not be sent because the station did not own the poll bit. This message indicates either poor line conditions or a faulty SDLC implementation.

Recommended Action   If the message recurs, run traces on the SDLC line. Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
`%SDLC-4-UNKNOWNADDR: Received input for unknown addr/input addr`
`[hex]. Tossing frame.`

Explanation   SDLC frames were received from an unknown (unconfigured) SDLC address.

Recommended Action   Either configure the station for SDLLC or STUN, or shut down the serial interface to disable the line. Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SDLC-4-WRONGADDR: [interface], data from wrong address, expected
[addr], received [addr]
```

Explanation   This condition typically occurs on multidropped lines when the T1 timer interval is too short or the **sdlc line-speed** command is not configured. In rare cases the RTS/CTS handshake can delay the transmission of a frame so long that a response is returned after the next station is polled.

Recommended Action   Adjust the value of the **sdlc line-speed** statement in the configuration file. (Either take line traces to observe appropriate T1 timer intervals, or adjust empirically.)

Error Message
```
%SDLC-6-XID_DISPLAY:  sa [sci_notation] da [sci_notation] ss [hex]
ds [hex] [[hex][hex][hex][hex]], 10
```

Explanation   A hardware or software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SDLC-6-XID_FORMAT: Unsupported XID format received, format [dec],
10
```

Explanation   A hardware or software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SDLC-4-XID_NOMATCH:  [chars], XID mismatch for [hex]. CONNECTION
REJECTED, 10
```

Explanation   A hardware or software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

SDLLC Error Messages

Synchronous Data Link Control/Logical Link Control, type 2 translation error messages

Error Message
```
%SDLLC-5-ACT_LINK: SDLLC: [chars] LINK address [hex] ACTIVATED:
[chars]
```

Explanation   An SDLLC media conversion session was 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 was deactivated. If deactivation is a result of an error condition, this message will include a reason.

Recommended Action   If the message does not include a description of an error, the deactivation was normal and the message is for information only. If the message does include a description of an error, begin problem analysis. Determine whether session loss is related to LLC2 timers by issuing the **debug llc2-err** command. If the problem is related to LLC2 timers, consider using SDLLC with the local acknowledgment feature. Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SDLLC-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   See also the "SDLLC-6-XID_NOMATCH" error message.

Error Message
```
%SDLLC-6-XID_FORMAT:  Unsupported XID format received, format [dec]
```

Explanation   An inappropriate exchange identification (XID) format was received for this mode of SDLLC operation. Review the type of devices you are connecting with SDLLC to make sure they are supported.

Recommended Action   See the "SDLLC-6-XID_NOMATCH" error message.

Error Message
```
%SDLLC-4-XID_NOMATCH: [chars], XID mismatch for [hex]. CONNECTION
REJECTED
```

Explanation   An inbound exchange identification (XID) from a PU 2.0/PU 2.1 node was rejected. The targeted SDLC address is displayed. The XID information is displayed in a subsequent message—"SDLLC-6-XID_DISPLAY" or "SDLLC-6-FORMAT."

Recommended Action   This is a security feature. 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.

SEC Error Messages

IP security error messages

Error Message
```
%SEC-6-IPACCESSLOGDP: list [dec] [chars] [chars] [inet] -> [inet]
([dec]/ [dec]), [dec] packet[chars]
```

Explanation   A packet matching the log criteria for the given access list was detected.

Recommended Action   Informational message only. No action required.

Error Message
```
%SEC-6-IPACCESSLOGNP: list [dec] [chars] [dec] [inet] -> [inet],
[dec] packet[chars]
```

Explanation   A packet matching the log criteria for the given access list was detected.

Recommended Action   Informational message only. No action required.

Error Message
```
%SEC-6-IPACCESSLOGP: list [dec] [chars] [chars] [inet]([dec]) ->
[inet]([dec]), [dec] packet[chars]
```

Explanation   A packet matching the log criteria for the given access list was detected.

Recommended Action   Informational message only. No action required.

Error Message
```
%SEC-3-NOMAX: No default for NLESO defined
```
```
%SEC-2-NOOPT: Box secured, no option on internal packet
```
```
%SEC-2-NOTSEC: First opt in tcb not BASIC security
```
```
%SEC-2-SECINS: Security opt in tcb not SECINSERT
```

Explanation   An internal software error occurred.

Recommended Action   If any of these messages recur, copy the message exactly as it appears and contact your technical support representative for assistance.

Error Message
```
%SEC-4-TOOMANY: Box secured, too many options on internal packet
```

Explanation   No room for all desired IP header options. Packet discarded.

Recommended Action   Configure for fewer IP header options.

SERVICE MODULE Error Messages

This section contains error messages generated by the service module.

Error Message
`%SERVICE_MODULE-4-ACCESSERROR: Unit [dec] reports register access error - [chars]`

Explanation   The T1 module supplied an incorrect register address. A new version of the module might be operating with an old Cisco IOS software image.

Recommended Action   Update the Cisco IOS software image on the system. If this action does not solve the problem, copy the error message exactly as it appears and report it to your technical support representative.

Error Message
`%SERVICE_MODULE-4-ALARMFAILURE: Unit [dec] - 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 result, the system disabled alarm processing.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
`%SERVICE_MODULE-4-BADTYPE: Unit [dec] - reports incompatible module type [dec] against router hw detect`

Explanation   A "register read" request returned an identity for a module that was not the same as the identity reported by the router hardware pinout.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

`%SERVICE_MODULE-4-COMMANDFAILED: Unit [dec] 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, and report it to your technical support representative.

Error Message

`%SERVICE_MODULE-0-INITFAILURE: Unit [dec] - failed to create data`
`structures used for module-access`

Explanation   The channel service unit/data service unit (CSU/DSU) driver failed to allocate memory for its data structures. This is a catastrophic error. The system has crashed.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

`%SERVICE_MODULE-4-INTERBYTETIMEOUT: Unit [dec] - timed out while`
`[chars] byte [dec] of [dec] length register [dec]`

Explanation   The module took more than 2 seconds to respond between bytes.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

`%SERVICE_MODULE-3-LOOPDOWNFAILED: Unit [dec] - WARNING - Loopdown of`
`remote unit failed`

Explanation   A remote channel service unit/data service unit (CSU) is looping pings and/or test patterns back to the system. This error can be triggered if you disable loopback tests on the remote CSU after placing the remote CSU into a remote loopback state.

Recommended Action   Execute a **clear** command on the remote CSU.

Error Message
`%SERVICE_MODULE-5-LOOPDOWNREMOTE: Unit [dec] - Remote loopback test cancelled`

Explanation   A hardware or software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative for assistance.

Error Message
`%SERVICE_MODULE-5-LOOPUPFAILED: Unit [dec] - Loopup of remote unit failed`

Explanation   The loopback test on the remote unit failed. The failure might indicate that the network connection is broken or that loopback tests are disabled at the other side.

Recommended Action   Check that the router is connected to the network. Enable loopback tests on the remote unit. If the problem persists, copy the error message exactly as it appears and report it to your technical support representative.

Error Message
`%SERVICE_MODULE-5-LOOPUPREMOTE: Unit [dec] - Remote unit placed in loopback`

Explanation   You executed a **loopback** command on the remote unit. The remote unit is now in loopback state.

Recommended Action   No action is required.

Error Message
`%SERVICE_MODULE-4-NOTREADY: Unit [dec] not ready for register access`

Explanation   The module was waiting for a ready status before executing a read/write request. The system reported a not ready status for 5 seconds, which caused the module to terminate the read/write request.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SERVICE_MODULE-4-OLDIMAGE: Unit [dec] - router image older than
module version - access errors may be seen
```

Explanation The Cisco IOS software image does not recognize the programmable ROM (PROM) software version number on the module. 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 [dec] - giving up after [dec]
repeated resets couldn't bring module up again
```

Explanation The software issued several "clear service-module" requests to the module. The module did not respond to these requests.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SERVICE_MODULE-4-REQUESTOVERLOAD: Unit [dec] - 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 channel service unit/data service unit (CSU/DSU). A thread had to wait for more than 5 seconds on this semaphore.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SERVICE_MODULE-5-RESET: Reset of Unit [dec] issued
```

Explanation This message indicates that the module was reset.

Recommended Action No action is required.

Error Message

```
%SERVICE_MODULE-4-RESETFAILURE: Unit [dec] - failed to create reset
process - non-default module configuration may be lost
```

Explanation To reset the system, 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 might have been lost.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

```
%SERVICE_MODULE-4-UNKNOWNALARM: Unit [dec] reports unknown network
alarms - alarm status reg = [hex]
```

Explanation A recent version of the module operating with an old Cisco IOS software image did not recognize an alarm condition.

Recommended Action Update the Cisco IOS software image on the system. If this action does not solve the problem, copy the error message exactly as it appears and report it to your technical support representative.

SLIP Error Messages

Serial Line Internet Protocol error messages

Error Message

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

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

Explanation An internal software error occurred.

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

SMF Error Message

Software MAC filter error message

Error Message
```
%SMF-3-NO_MEM: failed to create SMF entry for [sci_notation] on
[chars] from chunk [chars]
```

Explanation   The preallocated memory resources for the SMF have been exhausted.

Recommended Action   Reduce the number of interfaces on which transparent bridging is configured. Copy the error message exactly as it appears, and report it to your technical support representative.

SMRP Error Messages

Simple Multicast Routing Protocol error messages

Error Message
```
%SMRP-2-ASSERTFAILED: SMRP assertion failed: [chars]
```

Explanation   The software detected an inconsistency. This is considered a serious error. The router attempts to continue, but SMRP processing may 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 technical support representative.

Error Message
```
%SMRP-7-DEBUGMSG: SMRP Debug: [chars]
```

Recommended Action   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 technical support representative.

Error Message
%SMRP-5-NEIGHBORDOWN: [chars]: SMRP neighbor down - [chars]

Explanation A neighboring SMRP router is now down.

Recommended Action Notification message only. No action required.

Error Message
%SMRP-6-NEIGHBORUP: [chars]: SMRP neighbor up - [chars]

Explanation A neighboring SMRP router has appeared.

Recommended Action Notification message only. No action required.

Error Message
%SMRP-3-NOFDDICOMPAT: SMRP port [chars] disabled; pre-fdditalk not
supported

Explanation SMRP cannot be started on an interface that is 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 Notification message only. No action required.

Error Message
%SMRP-6-PORTUP: [chars]: SMRP port up - [chars]

Explanation An SMRP port has come up.

Recommended Action Notification message only. No action required.

SNAPSHOT Error Messages

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 occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

`%SNAPSHOT-2-NOMEMORY: Unable to create Snapshot SAB. Updates will NOT be sent`

Explanation   The router is running out of memory, which impacts the operation of snapshot.

Recommended Action   Check memory usage of the router. Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

`%SNAPSHOT-2-TOOMANYDIALERS: Exceeded maximum dialer interfaces to watch. Ignoring [chars]`

Explanation   Snapshot is being used over more than 100 DDR interfaces.

Recommended Action   Do not use snapshot over more than 100 DDR interfaces.

SNMP Error Messages

Simple Network Management Protocol error messages

Error Message

```
%SNMP-4-NOTRAPIP: SNMP trap source [chars] has no ip address
```

Explanation   The user entered an **snmp-server trap-source** command. The interface requested for use as the source address has no address associated with it. The SNMP trap is being sent anyway, but without the source address that the user intended.

Recommended Action   There are two possible solutions. Either enter a **no snmp-server trap-source** command to disable the request for a specific source IP address, or add an IP address to the interface referenced in the **snmp-server trap-source** configuration command.

Error Message

```
%SNMP-3-SOCKET: can't open UDP socket
```

Explanation   The SNMP server was unable to open a port for receiving SNMP requests. This usually happens when the SNMP server is started using the **snmp-server community** configuration command on a router or communication server with an interface that has no IP address configured. Another possible cause is low memory.

Recommended Action   Configure at least one interface with an IP address or specify the **no snmp-server** command to remove the SNMP server process. Call your technical support representative if problems persist or if it becomes necessary to add memory.

SSE Error Messages

Silicon switching engine error messages

Error Message
`%SSE-3-BADMEMORY: SSE memory failure detected`

Explanation   A memory error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
`%SSE-1-BOGUSEQ: SSE bogus equal branch [hex], [hex], [dec] [hex]`

Explanation   An internal inconsistency in the data structures used by the SSE occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
`%SSE-2-BOGUSEQ: SSE bogus equal branch  [hex], [hex], [dec] [hex]`

Explanation   A hardware or software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
`%SSE-6-COMPERR: SSE compilation failure -- [chars]`

Explanation   A software failure occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SSE-2-HUNG: SSE hung -- [chars]
```

Explanation   The SSE is hung.

Recommended Action   Reboot the SSE.

Error Message
```
%SSE-2-HWFAILURE: SSE hardware failure-- [chars] code [hex]
```

Explanation   A hardware error occurred, indicating 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, and report it to your technical support representative.

Error Message
```
%SSE-2-MEMERROR: SSE memory failure, address [hex] expected [hex],
got [hex]
```

Explanation   A hardware error occurred, indicating 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, and report it to your technical support representative.

Error Message
```
%SSE-1-NESTADDR: SSE nested addresses detected, protocol [dec] [dec]
```

Explanation   An internal inconsistency in the data structures used by the SSE occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

`%SSE-2-NESTADDR: SSE nested addresses detected, protocol [dec] [int]`

Explanation A hardware or software error occurred.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

`%SSE-1-NOMATCH: SSE delete didn't end at a match node, type [char] value [dec], address [dec], bytecount [dec], high [dec], state [dec]`

Explanation An internal inconsistency in the data structures used by the SSE occurred.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

`%SSE-2-NOMATCH: SSE delete didn't end at a match node, type [char], value [dec], address [int], bytecount [dec], high [dec]`

Explanation A hardware or software error occurred.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

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

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

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

Error Message
`%SSE-2-NOTZERO: Program memory does not start at zero`

Explanation   A hardware error occurred, indicating 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, and report it to your technical support representative.

Error Message
`%SSE-2-SWFAILURE: SSE software failure -- [chars] [hex]`

Explanation   A software failure occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

STANDBY Error Messages

Hot Standby Router Protocol error messages

Error Message
`%STANDBY-3-BADAUTH: Bad authentication from [inet], remote state [chars]`

Explanation   Two routers participating in the Hot Standby protocol disagree on the valid authentication string.

Recommended Action   Use the **standby authentication** interface command to repair the Hot Standby protocol authentication discrepancy between the local system and the one whose IP address is reported.

Error Message
`%STANDBY-3-MISCONFIG: Attempt to change [chars] MAC address to`
`[enet] when DECNET already running`

Explanation   A software or hardware error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
`%STANDBY-3-NOBUFFER: No buffer available for sending HELLO`

Explanation   The Hot Standby protocol software was unable to allocate a packet buffer. The system may be out of memory.

Recommended Action   Record the output from the following commands: **show proc mem** (repeated twice), **show mem**, **show buffers**, **show version**, **write terminal**. Provide this information to your technical support representative.

Error Message
`%STANDBY-3-NOMEMORY: No memory available for [chars]`

Explanation   The system was unable to initialize the Hot Standby protocol on an interface. The system may be out of memory.

Recommended Action   Record the output from the following commands: **show proc mem** (repeated twice), **show mem**, **show version**, **write terminal**. Provide this information to your technical support representative.

Error Message
`%STANDBY-3-NOSOCKET: Unable to open socket`

Explanation   The system was unable to initialize an IP connection for the Hot Standby protocol.

Recommended Action   Make sure that there is at least one interface configured to run IP.

STUN Error Messages

Serial tunneling error messages

Error Message
```
%STUN-3-BADCONN: CONN: bad connection ([dec]), peer:
[chars]
```

```
%STUN-3-BADLENOP: [chars]: bad len or unknown op,
op [dec], len [dec]
```

```
%STUN-3-BADMAGIC: [chars]: wrong magic, mine [hex],
theirs [hex] ([dec])
```

```
%STUN-3-BADMAGICTCP: [chars]: peer [chars], wrong
magic, min [hex], theirs [hex]
```

```
%STUN-3-BADPASSIVEOPEN: passive open from [inet]
([dec]) -> [dec] failed
```

```
%STUN-3-CONNILLSTATE: CONN: Peer [chars], illegal
state [dec]
```

Explanation   An internal software error occurred.

Recommended Action   If any of these messages recur, copy the message exactly as it appears and contact your technical support representative for assistance.

Error Message
```
%STUN-6-CONNOPENFAIL: CONN: peer [chars] open failed,
[chars] [[dec]]
```

Explanation   An attempt to connect to a remote TCP STUN peer failed.

Recommended Action   Verify that the remote peer is accessible from this router, that it is running software capable of supporting STUN, and that it is configured correctly.

Error Message
`%STUN-6-ERR: [chars]: [chars]: [chars], op [hex], len [dec]`

Explanation   An internal software error occurred.

Recommended Action   If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message
`%STUN-2-NOBUF: Interface [chars], no buffer available to [chars]`

Explanation   A memory shortage existed at the time that the configuration command was issued. This condition is rare and, under normal conditions, temporary.

Recommended Action   Reconfigure the STUN group. If memory shortages persist, call your technical support representative for assistance.

Error Message
`%STUN-3-NOINPIDB: Input idb not set, 10`

Explanation   A software or hardware error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

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

Explanation   The system does not have sufficient memory to define a new STUN schema.

Recommended Action   This error message should only print when the router is critically short of memory. Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
%STUN-3-NOTGEM: No memory for STUN protocol sdlc-tg definition

Explanation   A software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
%STUN-2-NOTGI: Please remove and redefine protocol group [dec]

Explanation   An internal error occurred. The configuration is irregular.

Recommended Action   Remove and reconfigure the STUN protocol group. Record the configuration and call your technical support representative for assistance.

Error Message
%STUN-6-OPENED: [chars]: peer [chars] opened,
[previous state [chars]]

%STUN-6-OPENING: CONN: opening peer [chars], [dec]

%STUN-6-PASSIVEOPEN: passive open [inet]([dec]) -> [dec]

Explanation   A connection attempt to a remote peer completed successfully (OPENED, PASSIVE-OPEN) or is in the process of being opened (OPENING). This is good, expected behavior.

Recommended Action   Informational message only. No action required.

Error Message
%STUN-6-PEERSHUTDOWN: shutting down peer [chars] on [chars]

Explanation   A connection to a remote peer is being shut down. This is typically the result of user intervention in STUN reconfiguration or disabling. This is good, expected behavior.

Recommended Action   Informational message only. No action required.

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

Explanation   An internal software error occurred.

Recommended Action   If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

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

Explanation   A remote peer reestablished a connection to this router.

Recommended Action   Informational message only. No action required.

Error Message
`%STUN-3-SENDPUNT: [chars]: sent [chars] to [chars]`

`%STUN-3-SENDPUNTTCP: [chars]: sent [chars] to ([[dec]])[inet]`

Explanation   An internal software error occurred.

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

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

Explanation   A remote peer closed a STUN connection with this router.

Recommended Action   Examine the other router to see why it closed this connection with this peer. (This can be caused by normal events, such as reconfiguration.)

Error Message
`%STUN-6-TCPPEERSHUT: [chars] [chars], [inet]([dec])`

Explanation   This route closed a STUN connection with a remote peer.

Recommended Action   Examine this router to see why it closed this connection with this peer. (This can be caused by normal events, such as reconfiguration.)

SUBSYS Error Messages

Software subsystem error messages

Error Message
%SUBSYS-2-BADCLASS: Bad subsystem class [dec] - ignoring subsystem

Explanation   A software consistency check failed.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
%SUBSYS-2-BADSEQUENCE: Subsystem ([chars]) has cross-class sequence for ([chars])

Explanation   A software or hardware error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
%SUBSYS-2-BADVERSION: Bad subsystem version number [dec] - ignoring subsystem

Explanation   A software consistency check failed.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
%SUBSYS-2-MISMATCH: Kernel and subsystem version differ [dec.dec]

Explanation   A software consistency check failed.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

`%SUBSYS-2-NOTFOUND: Subsystem [chars] needs subsystem [chars] to start`

Explanation   A software consistency check failed.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

`%SUBSYS-2-RECURSION: Maximum sequence depth exceeded ([dec]) by ([chars])`

Explanation   A software or hardware error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

SYS Error Messages

Operating system error messages

Error Message

`%SYS-2-ALREADYFREE: Buffer [hex] already in free pool [chars]`

`%SYS-3-BADBLOCK: Bad block pointer [hex]`

`%SYS-3-BADDISP: Bad dispose code [hex] in [chars]`

`%SYS-3-BADFREEMAGIC: Corrupt free block at [hex] (magic [hex])`

Explanation   A block of memory is corrupt at the indicated location.

Recommended Action   If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message
%SYS-2-BADBUFFER: Attempt to use [chars] buffer as [chars], ptr=
[hex], pool= [hex]

Explanation   A hardware or software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
%SYS-3-BADFREEPTRS: Bad [chars] pointer [hex] at [hex] ([chars] =
[hex]

Explanation   A pointer in the block header at the indicated location is corrupt.

Recommended Action   If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message
%SYS-3-BADLINKTYPE: Unexpected linktype [dec]

Explanation   A software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
%SYS-2-BADLIST: Regular expression access check with bad list [dec]

Explanation   A software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

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, and report it to your technical support representative.

Error Message

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

Explanation   A software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

%SYS-2-BADPID: Bad pid [dec] for tty [t-line]

%SYS-2-BADPOOL: Attempt to return buffer with corrupt pool pointer, ptr= [hex], pool= [hex]

%SYS-2-BADPOOLMAGIC: Attempt to use pool pointer with corrupt header, pool= [hex]

%SYS-2-BADSHARE: Bad sharecount in [chars], ptr=[hex],count=[hex]

%SYS-2-BADSTACK: Process [chars] has trashed stack, old size [dec]

%SYS-6-BLKINFO: [chars]blk [hex], words [dec], alloc [hex][chars] RZ offset [dec], dealloc [hex], rfcnt [hex]

%SYS-2-CFORKLEV: cfork at level [dec]

Explanation   An internal software error occurred.

Recommended Action   If any of these messages recur, copy the message exactly as it appears and contact your technical support representative for assistance.

Error Message
```
%SYS-3-BADPRINT: Process has no associated tty (in [chars]).,
10*ONESEC
```

Explanation   A software or hardware error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SYS-3-BADPROCESS: Bad process ID ([dec]) when [chars] process table
```

Explanation   An internal software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

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

Explanation   A software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SYS-2-BLOCKHUNG: Task hung with blocking disabled, value = 0x[hex],
NOBLOCK_LIMIT
```

Explanation   An internal software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SYS-2-CFORKLEV: process create of [chars] failed (at level [dec]),
30*ONESEC
```

Explanation   An internal software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SYS-2-CFORKMEM: process create of [chars] failed (no memory),
30*ONESEC
```

Explanation   No memory was available to create a process.

Recommended Action   If you suspect a memory leak, copy this message exactly as it appears, and report it to your technical support representative. If a memory leak does not appear to be the problem, ensure that more memory is available to support the additional features.

Error Message
```
%SYS-2-CHUNKBOUNDS: Attempted to exceed freelist chunk bounds chunk
[hex], data [hex],
```

Explanation   A software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SYS-2-CHUNKFREE: Attempted to free non-chunk memory, chunk [hex],
data [hex], 10 * ONESEC
```

Explanation   A software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

```
%SYS-2-CHUNKPARTIAL: Attempted to destroy partially full chunk,
chunk [hex], 10 * ONESEC
```

Explanation   A software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

```
%SYS-2-CHUNKSIBLINGS: Attempted to destroy chunk with siblings,
chunk [hex], 10 * ONESEC
```

Explanation   A software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

```
%SYS-5-CONFIG: Configured from [chars] by [chars]
```

```
%SYS-5-CONFIG_I: Configured from [chars] by [inet]
```

```
%SYS-5-CONFIG_L: Configured via LNM from [enet]
```

```
%SYS-5-CONFIG_M: Configured via MOP from [chars]
by [enet]
```

Explanation   The router's configuration was changed.

Recommended Action   Notification messages only. No action required.

Error Message

```
%SYS-2-CONFIG_DOWNFAIL: Generated configuration not downward
compatible
```

Explanation   A software or hardware error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
`%SYS-4-CONFIG_NEWER: Configurations from version [dec].[dec] may not`
`be correctly understood.`

Explanation   A software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
`%SYS-5-CONFIG_NV: Non-volatile store configured from [chars] by`
`[chars]`

`%SYS-5-CONFIG_NV_M: Non-volatile store configured via MOP from`
`[chars] by [enet]`

Explanation   The configuration was written successfully through the Maintenance Operation Protocol (MOP).

Recommended Action   No action required.

Error Message
`%SYS-3-CONFIG_NV_ERR: Non-volatile store write error - configuration`
`failed`

Explanation   The write of the nonvolatile configuration failed.

Recommended Action   If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message
`%SYS-3-CPUHOG: Task ran for [dec] msec. Process = [chars], PC = [hex]`

Explanation   A software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
`%SYS-3-DMPMEM: [hex]: [hex] [hex] [hex] [hex] [hex] [hex]`

Explanation   A software or hardware error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
`%SYS-4-DUAL_MESSAGE: SNMP system message request [dec] denied due to pending job`

Explanation   A software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
`%SYS-2-DUPEXPORT: Duplicate export vector [chars] registration attempt`

Explanation   An internal software error occurred.

Recommended Action   If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

```
%SYS-2-FREEBAD: Attempted to free memory at [hex], not part of buffer
pool
```

```
%SYS-2-FREEFREE: Attempted to free unassigned memory
at[hex], alloc [hex] dealloc [hex]
```

```
%SYS-2-GETBUF: Bad getbuffer, bytes= [dec]
```

```
%SYS-3-HARIKARI: Process [chars] top-level routine exited
```

```
%SYS-2-HEADER: Attempt to return buffer with
invalid buffer header, ptr= [hex]
```

Explanation   An internal software error occurred.

Recommended Action   If any of these messages recur, copy the message exactly as it appears and contact your technical support representative for assistance.

Error Message

```
%SYS-2-INLIST: Buffer in list, ptr= [hex]
```

```
%SYS-2-INLIST1: Buffer in list, ptr= [hex],
caller= [hex]
```

```
%SYS-2-INPUTQ: INPUTQ set, but no idb, ptr=[hex]
```

```
%SYS-2-INSCHED: [chars] within scheduler
```

```
%SYS-2-INTSCHED: [chars] at level [dec]
```

```
%SYS-3-INUSEFREE: Block [hex] on free list [dec] in use
```

Explanation   An internal software error occurred.

Recommended Action   If any of these messages recur, copy the message exactly as it appears and contact your technical support representative for assistance.

Error Message
`%SYS-3-INTPRINT: Illegal printing attempt from interrupt level.,`
`10*ONESEC`

Explanation   A software or hardware error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
`%SYS-4-INVALID_IMAGE: Running invalid image for platform!`

Explanation   The software image being run is for a different hardware architecture. This problem can occur on a Cisco 1003, Cisco 1004, or Cisco 1005. The Cisco 1003 and Cisco 1004 have a different image from the Cisco 1005.

Recommended Action   Install the correct software image.

Error Message
`%SYS-3-INVMEMINT: Invalid memory action ([chars]) at interrupt level`

Explanation   This message indicates that a memory allocation or deallocation was attempted from an interrupt handler.

Recommended Action   If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message
```
%SYS-2-LINKED: Bad enqueue of [hex] in queue [hex]

%SYS-2-LINKED: Bad p_dequeue of [hex] in queue [hex]

%SYS-2-LINKED: Bad p_requeue of [hex] in queue [hex]

%SYS-2-LINKED: Bad requeue of [hex] in queue [hex]

%SYS-2-LOWMEM: Low memory debug exception (limit =[dec] free =
[dec])
```

Explanation   The router is running short on memory.

Recommended Action   It may be necessary to free some memory by exiting a program. If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

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 current system configuration, network environment, or possibly a software error might have exhausted or fragmented the router's memory.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SYS-6-MEMDUMP: [hex]: [hex] [hex] [hex] [hex]
```

Explanation   This message is sent in conjunction with the "%SYS-6-BLKINFO" message. It provides additional data.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
%SYS-3-MGDTIMER: [chars][chars], timer = [hex], 10 * ONESEC

Explanation   A software or hardware error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
%SYS-3-MGDTIMEREXP: Unknown timer expiration, timer = [hex], type [dec], 10 * ONESEC

Explanation   The process received an expiration notice for a timer that does not belong to it.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
%SYS-3-MSGLOST: [dec] messages lost due to queue overflow

Explanation   A software error occurred.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

Error Message
%SYS-6-MTRACE: [chars]: addr, pc [hex], [hex] [hex], [hex] [hex], [hex] [hex], [hex [hex], [hex] [hex], [hex] [hex], [hex] [hex], [hex]

Explanation   The free memory pool is corrupted.

Recommended Action   If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message
```
%SYS-2-NOBLOCK: [chars] with blocking disabled
```

Explanation An internal software error occurred.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message
```
%SYS-6-NOBRIDGE: Bridging software not present
```

Explanation Your system is not equipped to be a bridge.

Recommended Action Install the bridging software option.

Error Message
```
%SYS-1-NOECO: WARNING: This 500-CS cannot run this version of
software. Please contact Customer Service for upgrade information.
tele: 1 (800) 553-NETS 1 (415) 903-7208 email: cs-rep@cisco.com
Hardware burned in address is [enet]
```

Explanation An Error Change Order (ECO) is needed.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SYS-2-NOMEMFRG: Memory fragmentation check debug exception
(fragment size [dec])
```

Explanation The system detected an error checking memory fragmentation.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

`%SYS-2-NOMEMORY: No memory available for [chars] [dec]`

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

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

Error Message

`%SYS-3-NOPROC: Process table full`

`%SYS-2-NOTDEAD: Rekilling process [chars], pid [dec]`

`%SYS-2-NOTQ: p_unqueue didn't find [hex] in queue [hex]`

`%SYS-2-NOTQ: unqueue didn't find [hex] in queue [hex]`

`%SYS-3-NULLIDB: Null idb in [chars]`

Explanation   An internal software error occurred.

Recommended Action   If any of these messages recur, copy the message exactly as it appears and contact your technical support representative for assistance.

Error Message

`%SYS-2-NOPROCESS: No such process [dec]`

Explanation   An internal software error occurred.

Recommended Action   If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message

`%SYS-3-NZREFCNT: Block [hex] on free list [dec] with ref count [dec]`

Explanation   A block of memory in the free pool is actually in use. The number of processes using the memory block is indicated.

Recommended Action   If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message
`%SYS-5-OUTSETUP: Configuration file [chars] accepted, aborting setup`

Explanation   A configuration was accepted through the network, so the setup session will be aborted.

Recommended Action   No action required.

Error Message
`%SYS-3-OVERRUN: Block overrun at [hex] (redzone [hex])`

Explanation   An internal software error occurred.

Recommended Action   If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

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

Explanation   The environmental monitor detected a high temperature condition.

Recommended Action   Make sure 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 the system down. Call your technical support representative for assistance, if necessary.

Error Message
`%SYS-2-PAKCLIP: Bad pak_clip, bytes= [dec]`

Explanation   A software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

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. It indicates the process or process fragment that was executing at the time of the error.

Recommended Action   Copy this messages exactly as it appears, and report it, along with the "SYS-3-OVERRUN" and "SYS-3-BADMAGIC" error messages, to your technical support representative.

Error Message
```
%SYS-2-QCOUNT: Bad dequeue [hex] count [dec]
```
```
%SYS-2-QCOUNT: Bad p_dequeue [hex] count [dec]
```
```
%SYS-2-QCOUNT: Bad p_unqueue [hex] count [dec]
```
```
%SYS-2-QCOUNT: Bad unqueue [hex] count [dec]
```
```
%SYS-2-QINSERT: Unable to add [chars] to queue - no elements
```
```
%SYS-4-REGEXP: [chars]
```

Explanation   An internal software error occurred.

Recommended Action   If any of these messages recur, copy the message exactly as it appears and contact your technical support representative for assistance.

Error Message
```
%SYS-3-REGARG: Registry service [chars] has too many arguments

%SYS-3-REGCREA2: Attempt to create registry service [chars] twice

%SYS-3-REGDFLT: Attempt to add default twice to registry service

%SYS-3-REGNONE: Registry [dec] service [dec] doesn't exist - [chars]

%SYS-3-REGTYPE: Registry service [chars] is wrong type, should be
[dec]
```

Explanation   An internal software consistency check failed.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SYS-5-RELOAD: Reload requested

%SYS-5-RESTART: System restarted -- [chars]
```

Explanation   A reload or restart was requested.

Recommended Action   Notification messages only. No action required.

Error Message
```
%SYS-4-RELOAD_ATTEMPT: Attempt via SNMP failed; system-shutdown not
configured
```

Explanation   A software error occurred.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

Error Message
```
%SYS-2-RETBUF: Bad retbuffer, ptr= [hex]

%SYS-2-RETBUF1: Bad retbuffer, ptr= [hex],
caller= [hex]

%SYS-2-SELF: s_setblock() on own process

%SYS-2-SELFLINKED: Buffer [hex] linked to itself in free pool
[chars]

%SYS-2-SHARED: Attempt to return buffer with sharecount
[dec],ptr= [hex]

%SYS-2-SHARED1: Attempt to return buffer with sharecount [dec], ptr=
[hex], caller= [hex]

%SYS-3-SOCKUNKN: Unknown socket protocol [dec]

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

%SYS-6-STACKLOW: Stack for [chars] [chars] running low, [dec]/[dec]
```

Explanation   An internal software error occurred.

Recommended Action   If any of these messages recur, copy the message exactly as it appears and contact your technical support representative for assistance.

Error Message
```
%SYS-2-SMASHED: Smashed block at 4085C, next 0, prev 0, size 3E80000
- Process = *Init*, level=5
```

Explanation   An internal software error occurred.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

Error Message
```
%SYS-2-SMASHEDINFO: Smashed block last freed 0, allocated by 30000,
name
```

Explanation   A software error corrupted the memory.

Recommended Action   Copy the message exactly as it appears and report it your
technical support representative.

Error Message
```
%SYS-4-SNMP_HOSTCONFIGSET: SNMP hostConfigSet request. Loading
configuration from [int].
```

Explanation   A software or hardware error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your
technical support representative.

Error Message
```
%SYS-4-SNMP_NETCONFIGSET: SNMP netConfigSet request. Loading
configuration from [int].
```

Explanation   A software or hardware error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your
technical support representative.

Error Message
```
%SYS-4-SNMP_WRITENET: SNMP WriteNet request. Writing current
configuration to [int].
```

Explanation   A software or hardware error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your
technical support representative.

Error Message
%SYS-2-SNMP0IDX: Attempt to [chars] snmpidb with if_index of 0.

Explanation   A software error occurred.

Recommended Action   Copy the message exactly as it appears and report it your technical support representative.

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

Explanation   A software error occurred.

Recommended Action   Copy the message exactly as it appears and report it your technical support representative.

Error Message
%SYS-2-SUPNOT: Can't create Registry [chars]

Explanation   An internal software consistency check failed.

Recommended Action   Copy the message exactly as it appears and report it your technical support representative.

Error Message
%SYS-2-SUPTWICE: Attempt to create Registry [chars] again, 30 *
ONESEC

Explanation   A software or hardware error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%SYS-5-TABLEERR: [chars] table [chars] damaged: [chars]
```

Explanation An internal table entry became corrupted.

Recommended Action Copy the message exactly as it appears, and report it your technical support representative.

Error Message
```
%SYS-6-TESTINFO: Scheduler test [hex] (for [chars]) just executed.
```

Explanation This message is an auxiliary to the "SYS-3-OVERRUN" and "SYS-3-BADMAGIC" error messages. It indicates which process or process fragment was executing at the time of the error.

Recommended Action Copy this message exactly as it appears, and report it, along with the "SYS-3-OVERRUN" and "SYS-3-BADMAGIC" error messages, to your technical support representative.

Error Message
```
%SYS-3-TIMERHOG: Timer callback ran long, PC = [hex], 10*ONESEC
```

Explanation A software error occurred.

Recommended Action Copy the message exactly as it appears, and report it your technical support representative.

Error Message
```
%SYS-3-TIMERNEG: Cannot start timer ([hex]) with negative offset
([dec])., 10 * ONESEC
```

Explanation An internal software error occurred.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
%SYS-3-TTYMEM: Tty[t-line], no memory to save tty default parameters

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

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

Error Message
%SYS-2-WATCHDOG: Process aborted on watchdog timeout, Process = [chars], ONESEC

Explanation The indicated process ran for such a long time without relinquishing the processor that the system killed it as a runaway.

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

Error Message
%SYS-3-WRONGFREELIST: Block [hex], size [dec], on wrong free list ([dec], [dec])

Explanation A freed buffer was placed on the wrong list of free buffers.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message
%SYS-2-WRONGPOOL: Buffer [hex] found in pool [hex], should be in pool [hex]

Explanation A software error occurred.

Recommended Action Copy the message exactly as it appears, and report it your technical support representative.

SYSMGT Error Messages

System Management error messages

Error Message

`%SYSMGT_RPC-3-IPC_ERROR: SYSMGT RPC - IPC [chars] [chars] failed ([chars])`

Explanation   The Channel Interface Processor (CIP) card network management event processing subsystem failed to set up the Interprocess Communications port. Network management events will not be processed from installed CIP cards.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

`%SYSMGT_RPC-3-NETMGT_EVENT: SYSMGT RPC - NETMGT Event: [chars] ([dec])`

Explanation   A software or hardware error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

`%SYSMGT_SNALLC-3-EVENT_ERROR: SYSMGT SNA LLC - [chars] ([dec])`

Explanation   A software or hardware error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

TAC Error Messages

Terminal Access Controller Access Control System (TACACS) protocol error messages

Error Message
`%TAC-6-SENDTMO: Send type [dec] to [inet] timed out`

Explanation   A background TACACS notification (enabled with the command **tacacs notify**) was not acknowledged by the TACACS server processor within the timeout period (5 minutes). The information contained in that notification was lost. This loss of information may interfere with accounting or auditing on the server.

This condition arises when the TACACS server is misconfigured, crashed, or became unreachable via the network.

Recommended Action   Check the TACACS server and the network attached to it.

Error Message
`%TAC-4-UNEXREP: Reply for non-existent request, [dec] on queue`

Explanation   The TACACS facility received a message it was not expecting. This may occur when a TACACS server sends duplicate responses or when it responds to a request that has already timed out. It also may be due to an internal software problem.

Recommended Action   If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

TBRIDGE Error Messages

Transparent bridging error messages

Error Message
```
%TBRIDGE-4-GIANT: Giant received on [chars], [dec] exceeds [dec]\n
DA [enet] SA [enet] [[hex]], (5 * ONESEC)
```

Explanation A packet was received that exceeds the expected maximum transmission unit (MTU) length for the receiving interface. The first four bytes of the packet following the source address are also provided to assist diagnosis.

Recommended Action Use the address and packet information provided to trace the source of these packets and reduce its MTU to conform to the standard for the given media.

Error Message
```
%TBRIDGE-4-INVALIDMEDIA: Invalid media encountered for bridging
```

Explanation Transparent bridging was configured on an interface that does not support it.

Recommended Action Remove transparent bridging from the configuration on the specified interface.

Error Message
```
%TBRIDGE-4-NOMEMORY: No memory available for transparent bridging
```

Explanation Packet memory was exhausted to the point that the few static buffers required for transparent bridging cannot be allocated.

Recommended Action Diagnose memory utilization using the **show buffers** and **show memory** commands.

Error Message
`%TBRIDGE-4-NOVCDROP: Destination VC unknown for packet, (5 * ONESEC)`

Explanation A transparently bridged packet destined for an ATM interface cannot be fully addressed.

Recommended Action Clear the bridge table to force re-learning of all addresses.

Error Message
`%TBRIDGE-4-NOVCFLOOD: No VC's configured for bridging on [chars], (5 * ONESEC)`

Explanation An ATM interface was configured for transparent bridging without also specifying the associated virtual circuits.

Recommended Action Configure the required virtual circuits on the specified interface.

Error Message
`%TBRIDGE-4-SMF_ACTION: invalid action found for [sci_notation] on [chars] - [hex], (5 * ONESEC)`

Explanation A software or hardware error occurred.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative.

TCP Error Messages

Transmission Control Protocol error messages

Error Message
```
%TCP-2-ACCEPT: Callback failed to accept connection from [int]:[dec]
to [int]:[dec] -- discarding
```

Explanation   An internal software error occurred.

Recommended Action   If this message recurs, copy it down exactly as it appears and contact your technical support representative for assistance.

Error Message
```
%TCP-6-BADAUTH:[chars] MD5 digest from [int]:[dec] to
[int]:[dec][chars]
```

Explanation   The system received a TCP packet with an invalid MD5 authentication digest on a connection endpoint. The message ends with the string "(RST)" 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 could be due to either misconfiguration or security weaknesses.

Error Message
```
%TCP-2-BUFFER: Tty[t-line], buffering bug

%TCP-2-PUTBYTE: Tty[t-line], tcp_putbyte() with
blocking disabled
```

Explanation   An internal software error occurred.

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

Error Message
`%TCP-2-NOTREADY: [chars] called but TCP not initialized`

Explanation   An internal software error occurred.

Recommended Action   If this message recurs, copy the message exactly as it appears and contact your technical support.

Error Message
`%TCP-6-NOTREADY: [chars] called but TCP not initialized`

Explanation   An internal software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
`%TCP-6-TOOBIG: Tty[t-line], too many bytes of options([dec])`

Explanation   An internal software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

TMQ Error Message

Inbound terminal port queuing error message

Error Message

`%TMQ-3-NOTFOUND: TMQ, Attempt to delete entry not in queue`

Explanation   An attempt was made to delete an entry not in the queue.

Recommended Action   Advisory message only. No action required.

TN Error Messages

Telnet error messages

Error Message

`%TN-2-BADLOGIN: Bad login string pointer [hex]`

`%TN-3-BADSTATE: Illegal state [dec]`

`%TN-3-READLINE: Unknown return code [dec] from telnet_readline()`

Explanation   An internal software error occurred.

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

TN3270 Error Message

TN3270 error messages relate to the TN3270 protocol, a variation of the IBM VT (virtual terminal) protocol.

Error Message
```
%TN3270-2-INP_OVF1: Input Buffer overflow
```

Explanation   A problem in TN3270 protocol was detected. Eight KB (8192) bytes of data were received without a TN3270 end-of-packet indicator. The TN3270 buffer overflowed.

Recommended Action   Copy this error message exactly as it appears, and contact your technical support representative for assistance.

TR Error Messages

Token Ring error messages

Error Message
```
%TR-3-ADPCHK: Interface [chars], adapter check error [hex] [hex]
[hex] [hex]
```

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

Recommended Action   Issue a **clear interface** command. If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

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

Explanation   Another internal process is communicating with the given Token Ring interface.

Recommended Action   Wait 1 minute and try again. If the condition persists, it probably indicates an internal software error. Copy the message exactly as it appears, and report it your technical support representative.

Error Message
```
%TR-4-BADADAPT: Unit [dec], adapter not responding
[hex] [hex][hex] [hex]
```

Explanation   A Token Ring interface is not responding to initialization.

Recommended Action   Confirm the Token Ring card's configuration, and make sure it is in the correct slot. If the interface is in the correct slot, this message indicates a probable hardware failure. Copy the message exactly as it appears, and report it your technical support representative.

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

Explanation   An internal software error occurred.

Recommended Action   If any of these messages recur, copy the message exactly as it appears and contact your technical support representative for assistance.

Error Message
```
%TR-3-BADHEADER: RX – Unit [dec]: type [dec], size [hex], use [hex]
flags [hex]
```

Explanation   The system detected corrupted data from the Token Ring interface card (CSC2R/1R and CSC-R16M only). There may be a hardware problem.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

Error Message
```
%TR-3-BADMUL: Unit [dec], Can't set TR address to hardware multicast
address [enet]
```

Explanation   An attempt was made to set the Token Ring interface MAC address to a reserved multicast address.

Recommended Action   Check your configuration. Make sure that your XNS and/or Novell Token Ring addresses have not inadvertently been set to reserved multicast addresses.

Error Message
```
%TR-3-BADRNGNUM: Unit [dec], ring number ([dec]) doesn't match
established number ([dec])
```

Explanation   The number you have configured for the local ring does not match the value currently in use on the ring.

Recommended Action   Check the configuration to make sure you used the correct ring number. If it is correct, confirm the configuration of all other bridges on the ring to make sure they are using the same ring number.

Error Message
```
%TR-3-BADSLOT: Unit [dec], Slot [dec] does not exist.
```

Explanation   This error message pertains only to the Cisco 4000. It is seen when software tries to access (discover) a network interface module (NIM) that is not in slot 1, 2, or 3. The software stalls trying to access the nonexistent slot. This message could indicate a card error.

Recommended Action   If this message recurs, call your technical support representative for assistance or a replacement card.

Error Message
```
%TR-3-BADSTART: Unit [dec], Start completion and wrong
idb state -state= [dec]
```

Explanation   An internal software error occurred.

Recommended Action   If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message
```
%TR-3-BADUNIT: Bad unit number [dec]
```

Explanation   This error message pertains only to the IGS. When displayed, it indicates that the system cannot find the chipset registers where it expects them to be. This is most likely a hardware error.

Recommended Action   If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance. It will be necessary to determine the hardware unit configuration.

Error Message
```
%TR-4-BKGND: Unit [dec], bkgnd int: last packet out [dec]ms
```

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

Explanation   An internal software error occurred.

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

Error Message
```
%TR-3-BOGUSDATA: [hex] [hex] [hex] [hex] [hex] [hex] [hex] [hex]
```

Explanation   This message displays the first eight bytes of frame data if the data length is invalid. It is the second part of the "%TR-3-BOGUSLENGTH" error message that follows.

Recommended Action   See recommended action for the "%TR-3-BOGUSLENGTH" error message.

Error Message
```
%TR-3-BOGUSLENGTH: Unit [dec], bad input length [dec], [chars] code.
```

Explanation   This is the first message displayed when the frame data length is invalid. It is unique to the CSC-R16 Token Ring card for all system versions.

Recommended Action   Display of both the "%TR-3-BOGUSLENGTH" and "%TR-3-BOGUSDATA" error messages indicates a serious problem on the interface between the Token Ring chipset, the SBE16 card, and the system driver. Copy the message exactly as it appears, and report it your technical support representative.

Error Message
```
%TR-3-COMPFAIL: Unit [dec], Tbuf completion failure,
result [hex]
```

```
%TR-3-FILTFAIL: Unit [dec], SRB filter set failed:
[hex] [hex][hex] [hex] (blk [hex]) downing
```

```
%TR-3-GETCONF: Unit [dec], get_config failed, result
[hex] [hex]
```

Explanation   An internal software error occurred.

Recommended Action   If any of these messages recur, copy the message exactly as it appears and contact your technical support representative for assistance.

Error Message
```
%TR-3-DIAGFAIL: Interface [chars] failed init diags [hex] [hex],
[chars]
```

Explanation   The microcode attempted to run its diagnostics on the chip and failed.

Recommended Action   Issue a **clear interface** command. If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

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

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

Recommended Action   Call your technical support representative to upgrade the Token Ring Monitor firmware, the system software, or both.

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

Explanation   The Token Ring hardware failed to initialize properly.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

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

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

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%TR-3-MADGETX: Unit [dec], lost packet using Transmit
Descriptor.
```

Explanation   This error message pertains only to the Cisco 4000. When displayed, it indicates that a packet was lost inside the Madge firmware, and the software lost the pointer to it.

Recommended Action   This message indicates a software problem on the card. If this message recurs, call your technical support representative for assistance or a replacement card.

Error Message
```
%TR-3-MODEFAIL: Unit [dec], change mode failed. result code=[hex],
error code=[hex]
```

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

```
%TR-3-NOFIRM: Unit [dec], no TMS380 firmware present. eagle=[hex],
magic=[hex]
```

Explanation   An internal hardware or software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%TR-3-NOMEMORY: Unit [dec], no memory for [chars]
```

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

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

Error Message
```
%TR-4-NOMOREPAGES: Unit [dec], Out of Pages for [chars].
```

Explanation   This error message pertains only to the Cisco 4000.When displayed, it indicates that the ability to switch the receive buffers for the Token Ring was halted due to an insufficient amount of memory.

Recommended Action   Reduce other system activity to ease memory demands and then reset the Token Ring interface by entering a **clear interface tokenring** command. If these actions do not solve the problem, upgrade to a larger memory configuration or call your technical support representative for assistance.

Error Message
`%TR-3-NOPAK: Unit [dec], Tbuf completion and no pakout`

Explanation   An internal hardware or software error occurred.

Recommended Action   If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message
`%TR-3-OLDTRIF: Obsolete firmware in multibus TR unit [dec] - does not support fast switching`

Explanation   A firmware upgrade is needed.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

Error Message
`%TR-3-OPENFAIL: Unit [dec], open failed: check the lobe cable DB-9 connection`

Explanation   The Token Ring interface was unable to insert itself into the ring. This is an indication of a busy or broken ring. The first character string in this error message indicates the stage of initialization at which the error occurred, and the second describes the error.

Recommended Action   Try to open the interface again. This generally can be accomplished by issuing the **clear interface tokenring** command. If the error message recurs, call your technical support representative for assistance.

Error Message
```
%TR-3-OPENFAIL2: Unit [dec], open failed: check the lobe cable
connection.
```

Explanation   The Token Ring interface was unable to insert itself into the ring, and the error code returned indicates a wiring problem.

Recommended Action   Check the cable connecting the router to the Token Ring MAU, and try to open the interface again. This generally can be accomplished by issuing the **clear interface tokenring** command. If the error message recurs, call your technical support representative for assistance.

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

Explanation   The Token Ring monitor firmware detected a fatal error that indicates an impending interface failure.

Recommended Action   Copy the error message and the interface message exactly as they appear and then report them to your technical support representative.

Error Message
```
%TR-3-PANICINF: Unit [dec], PI [hex] [hex] [hex] [hex][hex] [hex]
```

Explanation   This message is similar to the "%TR-3-PANIC" error message, but indicates a nonfatal error. This message appears in very unusual situations that should not arise in normal operation.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
`%TR-3-PANICTYPE: Unit [dec], [chars] error`

Explanation   This message is similar to the `%TR-3-PANIC` error message, but indicates a nonfatal error. This message appears in very unusual situations that should not arise in normal operation.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
`%TR-3-RESETFAIL: Unit [dec], reset failed, error code [hex]`

Explanation   An internal software error occurred.

Recommended Action   If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message
`%TR-3-RESETFAIL2: Unit [dec], reset failed, auxiliary processor init failed`

Explanation   This message isolates a particular RESETFAIL condition from several other reset failure conditions. It is unique to the CSC-R16 Token Ring card for all system versions and indicates a state problem.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

Error Message
`%TR-3-RIFBADMAGIC: Invalid magic number ([hex]) in`
`RIF [chars] table entry [hex]`

`%TR-3-RIFTBLTRASH: Trashed [chars] RIF table entry [hex] found and zeroed`

Explanation   An internal software error occurred.

Recommended Action   If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message
```
%TR-3-SETBRIDGEFAIL: Unit [dec], set bridge failed (code %#x)
```

Explanation A hardware error occurred. The source routing accelerator (SRA) chip on the Token Ring card could not be initialized.

Recommended Action A replacement card might be needed. Copy the message exactly as it appears, and contact your technical support representative for assistance.

Error Message
```
%TR-3-SETFAIL: Unit [dec], couldn't set interface to
physical address [enet]
```

Explanation An illegal MAC address was specified for this interface.

Recommended Action Normally the Token Ring interface uses the burned-in address contained in a PROM on the board. However, certain protocol stacks require the MAC address to be modified to an illegal value. Check your configuration for possible problems. If this message recurs, call your technical support representative.

Error Message
```
%TR-3-SETFUNFAIL: Unit [dec], set functional address
failed (code [hex])
```

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

```
%TR-3-SETOPTFAIL: Unit [dec], set open options failed
(code [hex])
```

```
%TR-3-SMTSTATFAIL: Unit [dec], get_smt: get smt
stats failed - result [hex]
```

Explanation An internal software error occurred.

Recommended Action If any of these messages recur, copy the message exactly as it appears and contact your technical support representative for assistance.

Error Message
`%TR-4-SNKBRIDG: Unit [dec], removing invalid bridge`

Explanation The system could not start a Token Ring source-route bridge because the interface in question does not have the appropriate Token Ring Monitor firmware or hardware.

Recommended Action Copy the message exactly as it appears, and report it your technical support representative.

Error Message
`%TR-3-STARTFAILED: Unit [dec], start failed, result [hex],reason [hex]`

Explanation The Token Ring Monitor firmware attempted to insert the system into the ring, and the chipset detected a nonstandard fatal error.

Recommended Action This message indicates a problem with the Token Ring chipset hardware. Copy the message exactly as it appears, and report it your technical support representative.

Error Message
`%TR-3-STARTFAILED2: Unit [dec], start failed, auxiliary processor init failed.`

Explanation This error message isolates a particular STARTFAIL condition from several other reset failure conditions. It is unique to the CSC-R16 Token Ring card for all system versions and indicates a state problem.

Recommended Action Copy the message exactly as it appears, and report it your technical support representative.

Error Message
```
%TR-6-STATE: TR[dec]: Ring Status: [chars]
```

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

Recommended Action   Informational message only. No action required.

Error Message
```
%TR-3-STATFAIL: Unit [dec], get_static: get stats
failed - Async: [hex] [hex] [hex] [hex]
```

Explanation   An internal software error occurred.

Recommended Action   If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message
```
%TR-6-STATRING: TR[dec]: Ring Status: [chars] [chars] ([hex]) LIV
[hex]
```

Explanation   This message is displayed when the Token Ring's status changed as determined by the chipset. This information also is used to automatically determine whether the interface is still usable to propagate network traffic. The meaning of each status code is shown in Table 5.

Recommended Action   Check the Token Ring for the indicated condition.

Table 5　　　**Token Ring Status Codes**

Code	Explanation	Fatal
0x8000	Signal loss	Yes
0x4000	Hard error	Yes
0x2000	Soft error	No
0x1000	Transmit beacon	Yes

Code	Explanation	Fatal
0x0800	Lobe wire fault	Yes
0x0400	Auto removal error	Yes
0x0100	Receive request removed	Yes
0x0080	Counter overflow	No
0x0040	Single station	No
0x0020	Ring recovery	No

Error Message
```
%TR-3-TRACMD: tra_cmd: unit [dec] bad state: cmd [hex]
[hex],result [hex] [hex] (blk [hex], iob
[hex])

%TR-4-UNKNOWNCOMP: Unit [dec], Unknown command
completion:cmd [hex], rslt [hex]

%TR-3-UNKNOWNT2M: Unit [dec], Unknown t2m command
[hex] [hex]
```

Explanation   An internal software error occurred.

Recommended Action   If any of these messages recur, copy the message exactly as it appears and contact your technical support representative for assistance.

Error Message
```
%TR-3-WIREFAULT: Unit [dec], wire fault: check the
lobe cable MAU connection
```

Explanation   The Token Ring hardware is reporting a wire fault condition.

Recommended Action   Check the cable connecting the router to the Token Ring media attachment unit (MAU).

TUN Error Messages

Tunnel error messages

Error Message
`%TUN-4-BADOUTMODE: Interface [chars] unsupported output mode [dec]`
`[chars]`

Explanation   The tunnel interface was set to an encapsulation mode that is not supported.

Recommended Action   Report the problem to your technical support representative and correct your configuration.

Error Message
`%TUN-4-RECURDOWN: [chars] temporarily disabled due to recursive`
`routing`

Explanation   When routing the same payload protocol over a carrier protocol (tunneling IP over IP, for example), it is possible to misconfigure your network so that you will try to route to the tunnel destination address via the tunnel. This is usually caused by a misconfiguration of the tunnel or a temporary instability due to route flapping elsewhere in your network. It is important to take steps to ensure that routing information between the carrier networks and the payload networks is not allowed to mix. If the router discovers a recursive routing problem, it will temporarily shut down the tunnel interface for a few minutes so that the situation that is causing this problem can resolve itself as routing protocols converge. If the problem is caused by misconfiguration, the link may oscillate indefinitely.

Recommended Action   No action required.

Error Message
`%TUN-4-RECURSHUT: [chars] administratively disabled due to recursive`
`routing`

Explanation   If the recursive routing situation reported by the RECURDOWN message is not cleared up after ten bounces, the tunnel interface will be administratively shut down to avoid further flapping.

Recommended Action   Determine the cause of the recursive routing situation, correct it, and then manually bring the interface back up using the **no shutdown** command.

UCODE Error Messages

Microcode error messages

Error Message

%UCODE-3-BADCHKSUM: Bad checksum in [chars], found [hex] expected
[hex]

Explanation   The microcode file is corrupted in some way; the checksum computed after reading the file from Flash does not match the one in the file. The file will not be downloaded, and the onboard ROM microcode will be used instead.

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

Error Message

%UCODE-3-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 than 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 is corrupted in some way; the checksum computed after reading the file from Flash does not match the one in the file. The file will not be downloaded, and the onboard ROM microcode will be used instead.

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

Error Message
%UCODE-3-IPCBUFFAIL: Unable to obtain IPC resources

Explanation The InterProcess Communication (IPC) service used to download
microcode to certain interface processors has failed to obtain a buffer. Certain interface
processors will not load properly.

Recommended Action Try the **reload** command again. If this error recurs, copy the error
message exactly as it appears and contact your technical support representative for
assistance.

Error Message
%UCODE-3-IPCINITFAIL: Unable to initialize IPC [chars] services

Explanation The InterProcess Communication (IPC) service used to download
microcode to certain interface processors has failed to initialize. Certain interface
processors will not load properly.

Recommended Action Reload the router.

Error Message
%UCODE-3-IPCINVALID: Invalid IPC request [dec] received from [hex]

Explanation The InterProcess Communication (IPC) service used to download
microcode to certain interface processors has received an invalid message.

Recommended Action Verify that the proper revisions of code are selected.

Error Message
%UCODE-3-LDFAIL: Unable to download ucode [chars] in slot [dec],
installed ucode loaded

Explanation For some reason, the microcode file specified by the configuration is not
suitable for downloading, or another error occurred. The onboard ROM microcode will be
loaded so the interface can remain operational.

Recommended Action Attempt to reload the microcode. If the message recurs, call your
technical support representative for assistance.

Error Message
`%UCODE-3-NOBUF: Unable to allocate memory for ucode buffer`

Explanation A buffer is required to decompress microcode before loading it into an interface processor. This buffer could not be allocated for some reason.

Recommended Action Copy the message exactly as it appears, and report it your technical support representative.

Error Message
`%UCODE-3-NOFILE: Ucode file [chars] not found, installed ucode loaded in slot [dec]`

Explanation The file specified by the configuration was not found in Flash. The onboard ROM microcode will be loaded so the interface can remain operational.

Recommended Action Use **show flash** to determine if the file is located in Flash. If the file is there, attempt to reload the microcode. If the message recurs, call your technical support representative for assistance.

Error Message
`%UCODE-3-NOROM: Invalid attempt to load ROM ucode in slot [dec]`

Explanation Some interface processors cannot load microcode from ROM.

Recommended Action Remove the erroneous configuration statement.

Error Message
`%UCODE-5-OBSOLETE: FDDI unit [dec] has obsolete microcode: please upgrade it`

Explanation This message occurs when an FDDI interface processor is found running microcode that does not support microcode CMT, which is required for all software releases from 10.2 on.

Recommended Action Upgrade the microcode on the interface processor.

Error Message
```
%UCODE-3-OLDHARD: Ucode file [chars] requires [chars] version
[dec].[dec] hardware or later
```

Explanation   The microcode specified requires a more recent version of the hardware than it found. The onboard ROM microcode will be loaded instead.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

Error Message
```
%UCODE-3-RDFAIL: Unable to read ucode file [chars] from flash
```

Explanation   For some reason, the microcode file was not read from Flash. Flash might be locked by another process or otherwise unavailable.

Recommended Action   Use the **show flash** command to determine whether Flash is in use and issue another **microcode reload** when Flash is free. If the message recurs, call your technical support representative for assistance.

Error Message
```
%UCODE-3-TOOBIG: File [chars] at length [dec] is too long for buffer
size [dec]
```

Explanation   The file is too large for the buffer. The onboard ROM microcode will be loaded.

Recommended Action   If the error message recurs after the onboard ROM microcode is loaded, call your technical support representative for assistance.

Error Message
```
%UCODE-3-VERSIONCK: Inappropriate version [dec].[dec] for [chars]
```

Explanation   An attempt was made to load an inappropriate version of microcode.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

Error Message

```
%UCODE-3-WRONGHARD: [chars] is [chars] ucode not [chars],
microcode/hardware mismatch
```

Explanation   The specified microcode file is for a different interface processor than specified in the configuration. The user has made a configuration error. The onboard ROM microcode will be loaded.

Recommended Action   Reenter your microcode configuration command after confirming the interface type and reload the microcode.

UNIX Error Message

UNIX error message

Error Message

```
%UNIX-1-SYSABORT: System aborted
```

Explanation   The system abnormally terminated.

Recommended Action   Record the output from the following commands:

- **show process memory** (repeated twice)
- **show memory**
- **show buffers**
- **show version**
- **show running-config**

Provide this information and the error message to your technical support representative.

UTIL Error Messages

Utility error messages

Error Message
```
%UTIL-3-RANGEINCON: internal inconsistency [dec] [hex]
```

Explanation   A fatal software error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%UTIL-2-RANGERET: list [hex] no memory, can't return range [dec]
[dec]
```

Explanation   A memory overflow error occurred.

Recommended Action   Investigate memory usage. If memory usage is abnormal, call your technical support representative for assistance. Otherwise, increase router memory.

Error Message
```
%UTIL-2-RANGEDUP: list [hex] already contains range [dec] [dec]
```

Explanation   A software error occurred.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

Error Message
```
%UTIL-3-RANGEINVERT: list [hex] low [dec] > high [dec]
```

Explanation   A software error occurred.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

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 failed.

Recommended Action   Review the error log for a corresponding memory allocation
failed message. Copy the error message exactly as it appears, and report it to your technical
support representative.

Error Message
`%UTIL-3-TREE: Data structure error--[chars], ONEMIN`

Explanation   A software error occurred, resulting in a data structure inconsistency.

Recommended Action   Copy the error message exactly as it appears, and report it to your
technical support representative. Ask for their assistance in obtaining a version of code with
the error fixed.

VINES Error Messages

Banyan Virtual Integrated Network Service error messages

Error Message
`%VINES-2-BADPARAM: [chars] called with [chars] parameter set to
[chars]`

Explanation   One of the VINES lookup functions was called with an illegal argument.

Recommended Action   Copy the message exactly as it appears, and report it your
technical support representative.

Error Message
`%VINES-2-BADTIMER: RTP timer for [chars] was found disabled, and was`
`reset., 10*ONESEC`

Explanation An internal interface timer is not running. This condition usually occurs after an interface reset.

Recommended Action None. The system automatically restarts the timer.

Error Message
`%VINES-2-CACHEFAILED:Cannot build cache entry ([dec] bytes) for`
`[v-name] on [chars]`

Explanation The cache population routing for VINES fast switching determined that the MAC header on a packet is too large to fit into the cache.

Recommended Action Copy the message exactly as it appears, and report it your technical support representative.

Error Message
`%VINES-2-CACHEUNSUPP: Caching of [chars] not supported on [chars]`

Explanation The cache population routing for VINES fast switching was called for an interface that does not support VINES fast switching.

Recommended Action Copy the message exactly as it appears, and report it your technical support representative.

Error Message
`%VINES-2-CONSISTENCY: Error [chars]`

Explanation The VINES code ran into a situation that should not happen. For example, an IPC port number needs to be allocated, but all 65,535 port numbers are currently in use.

Recommended Action Copy the message exactly as it appears, and report it your technical support representative.

Error Message
`%VINES-2-CORRUPTENTRY: Detected a corrupted entry in the [chars] table`

Explanation   The VINES code detected that an internal table entry was corrupted.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

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

Explanation   The router detected that its VINES address is being used by another router.

Recommended Action   Identify the other router that is using this address by manual inspection of the routers. Issue the command **vines routing recompute** on both routers. If a router does not support the recompute keyword, then on that router you must disable VINES, write the configuration to memory, reboot the router, and then reconfigure VINES.

Error Message
`%VINES-2-ENCAPFAILED: Encapsulation failed for [v-name] via [v-name] on [chars]`

Explanation   The cache population routing for VINES fast switching encountered an encapsulation failure when building a cache entry for a neighbor.

Recommended Action   Examine your configuration for causes of the encapsulation failure. Look for missing **map** statements, interfaces that have gone down, and so on.

Error Message
`%VINES-6-FNNOTFOUND: [chars] service [chars] routine missing [chars] vector.`

Explanation   There is an inconsistency in the static VINES data structures for handling application-layer packets.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

Error Message
```
%VINES-2-INIT: Init code for [chars] doesn't match defined
constant., 10*ONESEC
```

Explanation   A software or hardware error occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%VINES-2-INVALIDPATH: Bad [chars] in path for neighbor entry
[v-name]
```

Explanation   While searching the neighbor table, the code determined that a pointer that should point to a VINES path structure actually points to some other structure.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

Error Message
```
%VINES-2-INVALIDROUTE: Bad [chars] in route for server entry
[v-name]
```

Explanation   While searching the routing table, the code determined that a pointer that should point to a VINES route structure actually points to some other structure.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

Error Message
```
%VINES-6-IPCNOROUTINE: IPC port [dec] registered without an upcall
[chars]
```

Explanation   There is an inconsistency in the active VINES data structure for handling IPC DATA messages. A message was received for a port that should have a listener, but the listener routine cannot be found.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

Error Message
```
%VINES-2-NEIGHBOR: vines_update called with null
neighbor
```

Explanation   An internal software error occurred.

Recommended Action   If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message
```
%VINES-2-NOBUFFERS: No buffers available for [chars]
```

Explanation   There were no buffers available to send a packet.

Recommended Action   Examine your system for memory or buffer leaks.

Error Message
```
%VINES-2-NOMEMORY: No memory available for [chars]
```

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

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

Error Message
```
%VINES-2-NOVENCAP: Encapsulation failed on [chars], no vencap
routine
```

Explanation   The VINES code tried to send a packet on an interface that does not have a new encapsulation routine.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

Error Message
```
%VINES-2-REASSEMBLY: SRTP reassembly code returned invalid result
code [dec]., 10*ONESEC
```

Explanation   An internal software occurred.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%VINES-6-RPCNOSERVICE: IPC port [dec] registered without a service.
```

Explanation   There is an inconsistency in the active VINES data structure for handling Net RPC messages. A message was received for a port that should have a service description, but that service description cannot be found.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

Error Message
```
%VINES-6-RTNNOTFOUND: [chars] service [chars] routine not found
while [chars].
```

Explanation   There is an inconsistency in the active VINES service description data structures. A service handler routine cannot find the description of its own service.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

VIP Error Messages

Versatile Interface Processor error messages

Error Message
```
%VIP-3-BADMALUCMD: Unsupported MALU command [dec], arg=[hex],
pascb=[hex]
```

Explanation   The Route Processor (RP) or the Route/Switch Processor (RSP) passed down a command that the software was not prepared to handle.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message
```
%VIP-3-CMDNOPASCB: PASCB Null for command [dec], arg=[hex]
```

Explanation   The Route Processor (RP) or the Route/Switch Processor (RSP) passed down a command that the software was unprepared to handle.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

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, and report it to your technical support representative.

Error Message

`%VIP-2-NOICBS: msg_noicbs`

Explanation   No Switch Processor (SP) interrupt control block structure was associated with the port adaptor or the interface.

Recommended Action   Copy the error message exactly as it appears, and report it to your technical support representative.

Error Message

`%VIP-3-UNDEFIDBTYPE: Undefined idb type [dec]`

Explanation   This message is sent from the VIP kernel when it sees 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. The message 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 the version of the software being run 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 and report it to your technical support representative.

X25 Error Messages

X.25 error messages

Error Message

`%X25-3-ADDRESSBAD: Interface [chars], x25 address [chars] subaddress [char] is too long, X25_COMPLAIN_LEVEL`

Explanation   This message occurs when a subaddress is configured. When this subaddress is combined with the interface's X.121 address, 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
configuration retained.
```

Explanation   The interface's X.25 configuration is not valid; the existing configuration was not changed.

Recommended Action   Verify the following:

- The interface's switched virtual circuit ranges do not overlap; for nonzero values, lic <= hic < ltc <= htc < loc <= hoc. (For more information, refer to "Configuring Virtual Circuit Ranges" in the *Router Products Configuration Guide*.)

- If an incoming-only range is defined, check that it is numerically less than the two-way range.

- If an outgoing-only range is defined, check that it is numerically greater than the two-way range.

- No virtual circuit high/low parameter is zero unless its partner low/high parameter is also zero.

- The default window sizes are less than the interface modulo.

Error Message
```
%X25-4-BADMBIT: Interface [chars], VC [dec], partial data packet has
M-bit set
```

Explanation   This message occurs when a virtual circuit is 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 error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

Error Message
```
%X25-4-BADUPCALL: Interface [chars], Unexpected call
([chars]) from LLC2 DTE= [enet]
```

```
%X25-4-DEBUG_LCI: LCI deleted at interrupt time
```

```
%X25-2-ILLP4: Interface [chars], Illegal state [chars]
when P4
```

```
%X25-3-INTIMEQ: Interface [chars], LCN [dec] already in
timer queue, new time [dec]
```

```
%X25-3-NOLCI: Interface [chars], Delete: lci [dec] not
found in [chars] table
```

```
%X25-3-NOTFINDBH: Can't find bfe host address [inet] to
delete
```

```
%X25-3-NOTFINDI: Can't find address [inet] to delete
```

```
%X25-3-NOTFINDS: Can't find address [chars] to delete
```

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

Explanation   An internal software error occurred.

Recommended Action   If any of these messages recur, copy the message exactly as it appears and contact your technical support representative for assistance.

Error Message
```
%X25-3-COMPERR: Interface [chars] LCI [dec] low-level stac
compression error, X25_COMPLAIN_LEVEL
```

Explanation   A Stacker compression algorithm internal error or shortage of buffer space was encountered during a compression operation. This should never happen.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

Error Message
`%X25-4-LARGEPKSIZE: Interface [chars], [chars] packet sizes`
`[dec]/[dec] too large; lower values will be negotiated.`

Explanation   The interface's default packet sizes or outgoing packet size facility values are too large to be carried by Link Access Procedure, Balanced (LAPB).

Recommended Action   The router will negotiate lower packet size values automatically. The LAPB N1 value should be increased. For example, for an X.25 maximum packet size of 1024, modulo 8 X.25 operation will add 3 bytes of overhead and modulo 8 LAPB operation will add 4 bytes of overhead (the two bytes of CRC are defined to be included). This means that N1 must be at least 1031 bytes * 8 = 8248.

Error Message
`%X25-3-LCIBOGUS: in x25_timer NULL lci-idb [hex]`

Explanation   An internal software error occurred.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

Error Message
`%X25-5-NOBUF: Interface [chars] LCI [dec] [chars]`

Explanation   This is a warning only (the compressed packet was not lost). However, an X.25 packet layer RNR (wait) was generated and packet-level transmission on the LCN will not resume (RR issued) until a decompression buffer becomes available.

Recommended Action   If this message occurs frequently, you may need to modify the buffer pool. Copy the message exactly as it appears, and report it your technical support representative.

Error Message
`%X25-5-NOMEM: Interface [chars] LCI [dec] NO memory for dictionary`

Explanation The 14K PBP history dictionaries could not be allocated. PBP compression is not enabled.

Recommended Action Copy the message exactly as it appears, and report it your technical support representative.

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, X25_COMPLAIN_LEVEL`

Explanation Compression is not enabled because D-bit support is configured for the LCI.

Recommended Action Reconfigure 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, X25_COMPLAIN_LEVEL`

Explanation An attempt was made to configure the X.25 hold queue to less than the minimum value.

Recommended Action Configure the X.25 hold queue to be 10 or more.

Error Message
```
%X25-5-PBPNOEND: Interface [chars] LCI [dec] End system not configed
for X25 PBP, X25_COMPLAIN_LEVEL
```

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-PVCBAD: Interface [chars], PVC [dec], [chars]
```

Explanation A switched PVC cannot be connected. The final [chars] text string in the message represents the state of the PVC. These text strings can also appear in **show x25-vc** output. For more information, refer to the **show x25-vc** documentation in the *Router Products Command Reference* publication.

Recommended Action Validate the configuration of the PVCs at both ends of the connection, and reconfigure them if necessary.

Error Message
```
%X25-3-PVCDELETE: LCI for PVC [dec] being deleted!
```

Explanation A PVC was using an **x25 map** entry that was deleted or the interface configuration changed to make the PVC number illegal; this forces the deletion of the PVC.

Recommended Action No action required. Note that some attached equipment may object to an inability to use the deleted PVC.

Error Message
```
%X25-4-RANGEUNUSED: Interface [chars], [chars] VC range
unused; set limits to zero
```

Explanation   An outgoing-only or incoming-only virtual circuit range exactly overlaps the two-way virtual circuit range. This was the former method for specifying that a virtual circuit range was not used. The current method is to set the range limits to zero.

Recommended Action   Use the privileged **copy running-config startup-config** command to write the configuration to memory. This will store the modified (zero) range limits.

Error Message
```
%X25-3-SIZEBAD: Interface [chars] LCI [dec] Decompression size error
```

Explanation   An internal software error occurred. The PBP header has an uncompressed packet size field. Each uncompressed packet size is checked against this field.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

Error Message
```
%X25-3-SYNCBAD: Interface [chars] LCI [dec] Decompression sync
error. Expected [dec], got [dec]
```

Explanation   An internal software error occurred. The PBP header has a sync field. The sync field (8 bits) is checked on each received packet.

Recommended Action   Copy the message exactly as it appears, and report it your technical support representative.

Error Message
`%X25-4-VCLOSTSYNC: Interface [chars], VC [dec] TCP connection`
`[chars]`

Explanation An X.25 circuit that is being tunneled over a TCP connection between routers was cleared ungracefully. The last [chars] text string in the message can take one of two forms. If the text string is "closed unexpectedly," the router at the remote end of the connection 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 software release.

Recommended Action If the text string is "closed unexpectedly," reestablish the connection after the remote router or intervening network is operational. If the text string is "connection corrupted," upgrade the router at the other end of the connection to a more recent software release.

Error Message
`%X25-3-VERSIONBAD: Interface [chars] LCI [dec] Compression Version`
`mismatch. Expected [hex]; received [hex]`

Explanation An internal software error occurred. The PBP header has a mismatched version field. The version is checked on each received packet.

Recommended Action Copy the message exactly as it appears, and report it your technical support representative.

Error Message
`%X25-3-XOTPROTOCOL: XOT protocol error from [inet]: [chars]`

Explanation A protocol error was detected over an X.25-over-TCP (XOT) connection, causing the connected VC to close. A flaw may exist in the remote host's XOT implementation.

Recommended Action If this error recurs, copy the error message exactly as it appears and contact your technical support representative for assistance.

XNS Error Messages

Xerox Network Systems error messages

Error Message

`%XNS-3-BADPATHS: Invalid number of paths ([dec]) for [dec]`

`%XNS-2-BADROUTE: Error [chars] route - null table`

Explanation An internal software error occurred.

Recommended Action If either of these messages recur, copy the message exactly as it appears and contact your technical support representative for assistance.