



S4T68360 Error Messages

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

Error Message

```
%S4T68360-1-DWNLDCKSM: S4T68360 (bay [dec]), Download checksum error (sent = 0x[hex], received = 0x[hex])
```

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-DWNLDLDFL: S4T68360 (bay [dec]): PA down load failed
```

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-INITFAIL: S4T68360 (bay [dec]), Init Failed at [chars]
```

Explanation The S4T port adapter 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: S4T68360 (bay [dec]), Stale msg in [chars] - mbx0:%lx mbx1:%lx mbx2:%lx
```

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: S4T68360 (bay [dec]), PA down load failed to complete

Explanation The S4T port adapter 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: S4T68360 (bay [dec]), Not ready for download

Explanation The S4T port adapter hardware failed. The S4T port adapter 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: S4T68360 (bay [dec]): 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: S4T68360 ([dec]/[dec]), Buffer ownership error, pak=0x[hex]

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: S4T68360 (bay [dec]), Exception [dec], trace [dec]

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: S4T68360, [chars] Start Failed at [chars]

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: S4T68360, [chars] Stop Failed at [chars]

Explanation The S4T port adapter 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.

SCHED Error Messages

Scheduler error messages

Error Message

%SCHED-2-ATTRCMD: Attempt to [chars] attribute [chars] on process [dec]

Explanation Each process has various public and private attributes associated with it. This message indicates that an attempt was made to set or get a private attribute belonging to another process.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

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

Explanation Each process has various attributes associated with it. This message indicates that an attempt was made to set the specified attribute to an invalid value.

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

Error Message

%SCHED-3-CORRUPT: Scheduler '[chars]' corrupted by process [chars] (expected [hex], found [hex])

Explanation The scheduler has determined that its data structures were corrupted during the execution of the current process. This corruption is the result of either the actions of the process (multiple errors reported against the same process) or an interrupt driver (multiple errors reported against different processes).

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

Error Message

%SCHED-2-EDISMSCRIPT: Critical/high priority process [chars] may not dismiss

Explanation Each process executes at a specified priority level. Higher-priority processes must use the new scheduler primitives, while lower-priority processes can use primitives from either the new or old scheduler. This message indicates that a higher-priority process attempted to use an old scheduler primitive.

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

Error Message

%SCHED-3-INTSETWAKEUP: Invalid scheduler action ([chars]) at interrupt level

Explanation This message indicates that a process_set_wakeup_reasons was attempted from an interrupt handler.

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

Error Message

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

Explanation A process can register to be notified when various events occur in the router. This message indicates that an event for the specified process was lost and that the router might not be functioning correctly.

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

Error Message

%SCHED-2-NOATTR: Attempt to [chars] unknown process attribute [dec]

Explanation Each process has various attributes associated with it. This message indicates that an attempt was made to set or get a nonexistent process attribute.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

%SCHED-2-NOTWATCHTIMER: [chars] timer [hex] not being watched

Explanation A process can register to be notified when various events occur in the router. This message indicates that an attempt was made to deregister a timer expiration event that is not currently registered.

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

Error Message

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

Explanation In all Cisco products, the first 256 bytes of memory are unused and are off-limits. Newer platforms have hardware to immediately trap reads or writes to this area. Older platforms periodically check this memory. This message appears only on older platforms and indicates that this off-limits memory area was modified.

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]

Explanation Each process executes at a specified priority level. Higher-priority processes must use the new scheduler primitives, while lower-priority processes can use primitives from either the new or old scheduler. This message indicates that an attempt was made to set the specified process to a priority level that is not allowed for the type of scheduler primitives used.

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

Error Message

`%SCHED-2-QUEUENOTEMPTY: Attempt to delete non-empty watched queue [chars] (address [hex])`

Explanation A process can register to be notified when various events occur in the router. This message indicates that an attempt was made to destroy a queue that still contained items. These items are lost and not returned to free memory.

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

Error Message

`%SCHED-2-SEMNOTLOCKED: [chars] attempted to unlock an unlocked semaphore`

Explanation Some sections of code use semaphores to protect critical sections of software. This message indicates that an attempt was made to unlock a semaphore that was not locked.

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

Error Message

`%SCHED-2-SEMUNLOCK: [chars] attempted to unlock semaphore owned by [chars]`

Explanation Some sections of code use semaphores to protect critical sections of software. This message indicates that an attempt was made to unlock a semaphore that was not owned by the process attempting to unlock it.

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

Error Message

`%SCHED-2-SETHIGHORCRIT: Attempt to set [chars] priority on process [dec] ([chars])`

Explanation Each process executes at a specified priority level. Higher-priority processes must use the new scheduler primitives, while lower-priority processes can use primitives from either the new or old scheduler. This message indicates that an attempt was made to set the specified priority too high for a process using old scheduler primitives.

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

Error Message

`%SCHED-3-STACKSIZE: Illegal stack size ([dec]) specified for process [chars]`

Explanation Each process has its own stack space, which must be one of several predefined sizes. This message indicates that an attempt was made to specify an illegal stack size.

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 A process can register to be notified when various events occur in the router. This message indicates that a process destroyed a set of events without first individually removing each event in the set.

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

Error Message

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

Explanation A process can register to be notified when various events occur in the router. This message indicates that a process destroyed a set of events without first individually removing each event in the set.

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

Error Message

%SCHED-3-STUCKMTMR: Sleep with expired managed timer [hex], time %#Ta (%TE ago)

Explanation A process can register to be notified when various events occur in the router. This message indicates that a registered timer is expired and its value is unchanged after the process has executed two successive times.

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

Error Message

%SCHED-3-STUCKTMR: Sleep with expired timer [hex], time %#Ta (%TE ago)

Explanation A process can register to be notified when various events occur in the router. This message indicates that a registered timer is expired and its value is unchanged after the process has executed two successive times.

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]

Explanation A process can register to be notified when various events occur in the router. This message indicates that the process relinquished the processor 50 consecutive times and there were still outstanding events to be processed.

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])

Explanation A process can register to be notified when various events occur in the router. This message indicates that a process received an event it did not know how to handle.

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

Error Message

%SCHED-3-UNEXPECTEDMESSAGE: Unknown message [hex] received (ptr arg [hex], num arg [hex])

Explanation A process can register to be notified when various events occur in the router. This message indicates that a process received a message from another process that it does not know how to handle.

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

Error Message

%SCHED-3-UNEXPECTEDQUEUE: Queue event for unknown queue (index [dec])

Explanation A process can register to be notified when various events occur in the router. This message indicates that a process received a queuing event for an unknown queue.

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

Error Message

%SCHED-3-UNEXPECTEDTIMER: Unknown timer expiration, timer = [hex], type [dec]

Explanation A process can register to be notified when various events occur in the router. This message indicates that a process received a timer expiration event for an unknown timer.

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

Error Message

%SCHED-2-WATCH: Attempt to [chars] uninitialized watched [chars] (address [hex])

Explanation A processes can register to be notified when various events occur in the router. This message indicates that an attempt was made to register for an event without first creating the data structure for that event.

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-4-BADFRAME: [chars], Received bad SDLC [chars]frame, address [hex], control [hex]
```

Explanation A hardware or software error occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

```
%SDLC-3-CONFIGERR: [chars], addr [hex], Sent SNRM, received SNRM. Check link station roles
```

Explanation A hardware or software error occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco 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]
```

Explanation A hardware or software error occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

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

Explanation An SDLC frame had to be dropped from the output hold queue, 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 Frame Reject (FRMR) frame was received. This can be caused by a noisy serial line, an overloaded SDLC device, or corrupted data.

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

Error Message

```
%SDLC-2-ILLEGSTATE: [chars], illegal state for addr [hex], [chars]([dec])
```

Explanation An internal SDLC state violation was detected.

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

Error Message

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

Explanation 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-4-INVLDGRPCFG: Interface [chars], ignoring group-poll mismatch, UPOLL [hex]
```

Explanation A hardware or software error occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

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

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

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

Error Message

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

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-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-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 on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** output, call your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%SDLC-2-NOMEMORY: No memory available: [chars]

Explanation The requested operation failed because of a low-memory condition.

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

Error Message

%SDLC-2-NOPOINTER: AW_SDLC_SEC with no sdllc_llc pointer

Explanation An error condition occurred during SDLLC initiation.

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

Error Message

%SDLC-4-NOUA: [chars], addr [hex] received command [hex] in response to SNRM, expected UA

Explanation The router received a frame other than a unnumbered acknowledgment (UA) in response to a set normal response mode (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 on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** output, and report it to your Cisco 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 this 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-6-XID_DISPLAY: sa [sci_notation] da [sci_notation] ss [hex] ds [hex] [[hex] [hex] [hex] [hex]]

Explanation This message supplies the information for the received and rejected XID.

Recommended Action See the "SDLC-4-XID_NOMATCH" error message.

Error Message

%SDLC-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 "SDLC-4-XID_NOMATCH" error message.

Error Message

%SDLC-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 “SDLC-6-XID_DISPLAY” or “SDLC-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.

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.

SEC Error Messages

IP security error messages

Error Message

%SEC-6-IPACCESSLOGDP: list [chars] [chars] [chars] [int] [chars]- [int] ([dec]/[dec]), [dec] packet [chars]

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

Recommended Action No action is required.

Error Message

```
%SEC-6-IPACCESSLOGNP: list [chars] [chars] [dec] [int] [chars]- [int], [dec]
packet [chars]
```

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

Recommended Action No action is required.

Error Message

```
%SEC-6-IPACCESSLOGP: list [chars] [chars] [chars] [int] ([dec]) [chars]-
[int] ([dec]), [dec] packet [chars]
```

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

Recommended Action No action is required.

Error Message

```
%SEC-3-NOMAX: No default for NLESO defined
```

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

```
%SEC-2-NOOPT: Box secured, no option on internal packet
```

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

```
%SEC-2-NOTSEC: First opt in tcb not BASIC security
```

Explanation An internal software error occurred.

Recommended Action If this message recurs, contact your technical support representative.

Error Message

```
%SEC-2-SECINS: Security opt in tcb not SECINSERT
```

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

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

Explanation There is no room for all desired IP header options. The packet is 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 [chars] reports register access error - [chars]`

Explanation This message indicates that the T1 module supplied a bad register address. It might be because of having a new version of the module operating with an old Cisco IOS software image.

Recommended Action Update the Cisco IOS software image on the system. If this 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 [chars] - Could not access alarm status - disabling alarm processing`

Explanation The system issued an alarm interrupt, but could not read the alarm status register from the module. This caused the system to disable 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 [chars] - 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 [chars] not ready/responding after register [dec] access command issued
```

Explanation The system did not receive a ready signal within the allotted time after writing to the command register.

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

Error Message

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

Explanation The CSU/DSU driver failed to allocate memory for its data structures. This is a catastrophic error. 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 [chars] - 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 [chars] - WARNING - Loopdown of remote unit failed
```

Explanation A remote CSU is looping pings/test patterns back to the system. This error could be triggered if the user disabled loopbacks on the remote CSU after placing the remote CSU into remote loopback.

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

Error Message

```
%SERVICE_MODULE-5-LOOPDOWNREMOTE: Unit [chars] - Remote loopback test cancelled
```

Explanation A hardware or software error 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 [chars] - Loopup of remote unit failed`

Explanation This notification message indicates that the loopback on the remote unit failed. The failure may indicate that the network connection is broken, or that loopbacks are disabled at the other side.

Recommended Action Check that the router is connected to the network. Enable loopbacks 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 [chars] - Remote unit placed in loopback`

Explanation This notification message indicates that the user executed a **loopback** command on the remote unit. The remote unit is now in loopback.

Recommended Action No action is required.

Error Message

`%SERVICE_MODULE-4-NOTREADY: Unit [chars] 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. This 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 [chars] - router image older than module version
- access errors may be seen`

Explanation The Cisco IOS software image does not recognize the PROM software version number on the module. The system displays this message if the PROM has been upgraded to a new version, but the Cisco IOS software image has not been upgraded.

Recommended Action Upgrade the Cisco IOS software image.

Error Message

`%SERVICE_MODULE-4-REPEATEDRESET: Unit [chars] - giving up after [dec] repeated
resets couldn't bring module up again`

Explanation The software issued **several clear service-module** requests to the module. 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 [chars] - module request overload - lock access timeout
```

Explanation The system employs a Cisco IOS scheduler semaphore object to ensure mutually exclusive access across software threads to the CSU/DSU. This message indicates that 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 [chars] issued
```

Explanation This message indicates that the module was reset.

Recommended Action No action is required.

Error Message

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

Explanation To execute a reset, the Cisco IOS software must initiate a separate process. The Cisco IOS software did not have sufficient memory to create this separate process. The module came up in an initialized state with the default configuration. The user-defined configuration may have been lost.

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

Error Message

```
%SERVICE_MODULE-4-UNKNOWNALARM: Unit [chars] 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 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]

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

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

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco 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]

Explanation This message is generated by some **debug** commands to provide additional information about conditions in SMRP.

Recommended Action If you are experiencing problems in SMRP, these messages should be provided, along with any other information, in a report to your technical support representative.

Error Message

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

Explanation A neighboring SMRP router is now down.

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

Error Message

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

Explanation A neighboring SMRP router has appeared.

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

Error Message

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

Explanation SMRP cannot be started on an interface 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 This is a notification message only. No action is required.

Error Message

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

Explanation An SMRP port has come up.

Recommended Action This is a notification message only. No action is 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-TOOMANYDIALERS: Exceeded maximum dialer interfaces to watch. Ignoring [chars]`

Explanation Snapshot is being used over more than 100 dial-on-demand routing (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-3-BADOID: Attempt to generate an invalid object identifier`

Explanation A valid object identifier must contain at least two subidentifiers. An attempt was made to generate an object identifier whose size was less than two.

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

Error Message

`%SNMP-3-BADVALUE: Maximum number of index supported is 8`

Explanation An SNMP trap contains some number of MIB objects, and the size of the instance identifier for these objects is restricted. This message indicates that an attempt was made to generate an SNMP trap containing a MIB object whose size exceeded this limit.

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

Error Message

`%SNMP-3-CPUHOG: Processing [chars] of [chars]`

Explanation SNMP took too much time processing a request.

Recommended Action If feasible, use the **debug snmp packet** command to determine the contents of the SNMP request that is causing the message. Copy the error message exactly as it appears, and report it along with any debug output to your technical support representative.

Error Message`%SNMP-4-TRAPDROP: [chars]`

Explanation An attempt was made to generate an SNMP trap, but the trap could not be sent because of the reason given in this message. Most likely, this message means that the SNMP traps process is not running.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative. Use the **show process** command to determine whether the SNMP traps process is running. If it is not running, reload the system. If, after reloading, the SNMP traps process is still not running, there may not be enough memory for it to run.

Error Message`%SNMP-3-TRAPINTR: Attempt to generate SNMP trap from interrupt level`

Explanation During the processing of an interrupt, the code attempted to generate an SNMP trap. This is not allowed.

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

SNMP_MGR Error Messages

Simple Network Management Protocol proxy error messages

Error Message`%SNMP_MGR-3-BADAGETIMER: Unexpected age timer found on session [hex]`

Explanation An internal timer was found running when it should not have been.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative. Disable the SNMP manager via the **no snmp-server manager** command. Then re-enable it via the **snmp-server manager** command. This should effectively reset all of the internal structures.

Error Message`%SNMP_MGR-3-BADOP: Unknown operation code [int]`

Explanation An SNMP PDU delivered to the SNMP manager contains an unknown operation code.

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

Error Message

%SNMP_MGR-3-BADPDUTYPE: Received unknown PDU type: [int]

Explanation The SNMP manager was delivered a PDU of an unknown type.

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

Error Message

%SNMP_MGR-3-BADTRANSPORT: Unknown transport type: [int]

Explanation The SNMP manager was delivered a PDU from an unknown transport type.

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

Error Message

%SNMP_MGR-3-BADUSECOUNT: Corrupted use counter found on session [hex]

Explanation A cached SNMP session structure appears to have been corrupted.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative. Disable the SNMP manager via the **no snmp-server manager** command. Then re-enable it via the **snmp-server manager** command. This should effectively reset all of the internal structures.

Error Message

%SNMP_MGR-3-NOPROC: Failed to create SNMP Manager process

Explanation The SNMP manager process was unable to initialize. This is most likely because of a lack of memory.

Recommended Action Copy the error message exactly as it appears, and report it to your technical support representative. Use the **show memory** command to examine the amount of available memory. If free memory is low, you may need to reconfigure and/or reload the system.

Error Message

%SNMP_MGR-4-NOTENABLED: SNMP Manager not enabled (requested by [chars])

Explanation A Cisco IOS application is attempting to make use of the SNMP manager's services. However, the SNMP manager functionality has not been enabled.

Recommended Action You may enable the SNMP manager services via the **snmp-server manager** configuration command. Otherwise, the Cisco IOS application that is requesting these services is given in the message. Disable or reconfigure this application so that it no longer tries to make SNMP manager requests.

Error Message

`%SNMP_MGR-3-RESPDROP: Insufficient memory to handle response to request id [int]`

Explanation An SNMP response PDU was received, but not enough memory was available to cache the response and return it to the original requesting Cisco IOS application.

Recommended Action If this was only a transient problem, the original SNMP request will likely be resent, another SNMP response will be returned and delivered to the original requesting Cisco IOS application. If this message repeats, then you must free up some memory for the SNMP manager to function. Issue the **show memory** command to verify whether available memory is low. You may need to reconfigure and/or reload the system to free up some memory. Otherwise, you can disable the SNMP manager functionality via the **no snmp-server manager** command.

Error Message

`%SNMP_MGR-3-SESSIONINUSE: Attempt to destroy session [hex] that is still in use`

Explanation An attempt was made to remove a cached SNMP session structure. However, it appears that the session is still in use, and, therefore, should not be removed.

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

SSE Error Messages

Silicon switching engine error messages

Error Message

`%SSE-3-BADMEMORY: SSE memory failure detected, orig [hex] [hex], tested [hex] [hex]`

Explanation A memory error occurred.

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

Error Message

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

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

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

Error Message

%SSE-3-COMPERR: SSE compilation failure -- [chars]

Explanation A software failure occurred.

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

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 on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** output, call your Cisco technical support representative and provide the representative with the gathered information.

Error Message

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

Explanation A hardware error 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 on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** output, call your Cisco technical support representative and provide the representative with the gathered information.

Error Message

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

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

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

Error Message

```
%SSE-2-NOMATCH: SSE delete didn't end at a match node, type [char], value [dec],  
address [int], 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 on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** output, call your Cisco technical support representative and provide the representative with the gathered information.

Error Message

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

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

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

Error Message

```
%SSE-2-NOTZERO: program memory does not start at zero
```

Explanation A hardware error 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 on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** output, call your Cisco technical support representative and provide the representative with the gathered information.

Error Message

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

Explanation A software failure occurred.

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

STANDBY Error Messages

Hot Standby Router Protocol error messages

Error Message

%STANDBY-3-BADAUTH: Bad authentication from [int], 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 [sci_notation] when DECNET already running

Explanation A software or hardware error occurred.

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

Error Message

%STANDBY-3-NOSOCKET: Unable to open socket

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

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

Error Message

```
%STANDBY-6-STATECHANGE: Standby: [dec]: [chars] state [chars] [chars]
```

Explanation The router has changed state

Recommended Action No action is required.

STUN Error Messages

Serial tunneling error messages

Error Message

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

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

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

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

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

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

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

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

%STUN-3-BADPASSIVEOPEN: passive open from [int]([dec]) - [dec] failed

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

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

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

%STUN-6-CONNOPENFAIL: CONN: peer [chars] open failed, [chars] [[int]]

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-4-ERR: [chars]: [chars]: [chars], op [hex], len [dec]

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

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 Cisco technical support representative for assistance.

Error Message

%STUN-3-NOINPIDB: Input idb not set

Explanation A software or hardware error occurred.

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

Error Message

%STUN-2-NOMEMORY: No memory available: [chars]

Explanation The requested operation failed because of a low-memory condition.

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

Error Message

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

Explanation An internal error occurred. The configuration is irregular.

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

Error Message

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

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 No action is required.

Error Message

%STUN-6-OPENING: CONN: opening peer [chars], [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 No action is required.

Error Message

%STUN-6-PASSIVEOPEN: passive open [int]([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 No action is required.

Error Message

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

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

Recommended Action No action is required.

Error Message

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

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

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

Explanation A remote peer re-established a connection to this router.

Recommended Action No action is required.

Error Message

%STUN-3-SENDPUNT: [chars]: sent [chars] to [chars]

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

%STUN-3-SENDPUNTTCP: [chars]: sent [chars] to ([[int]])[int]

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

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], [int] ([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]) - 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-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-3-PAGEZERO: The [chars] class subsystem [chars] was being initialized`

Explanation In all Cisco products, the first 256 bytes of memory is unused and off-limits. Newer platforms have hardware to immediately trap reads or writes to this area. Older platforms periodically perform checks on this memory. This message appears only on older platforms and indicates that this off-limits memory area was modified.

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.

SWITCH Error Message

Switch interface error message

Error Message

%SWITCH-1-NOMEMORY: msgtxt_nomemory

Explanation The CPU was unable to access the memory it needs to carry out its functions. The following are some possible causes. The network is large, requiring a great deal of memory for routing tables, and so on. The router configuration has many features enabled, each of which require a certain amount of memory. A software error (memory leak) exists.

Recommended Action Reduce system activity to ease the memory demand, or upgrade to a larger memory configuration.

SYS Error Messages

Operating system error messages

Error Message

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

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

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

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

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

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

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-BADDISP: Bad disposal code [hex] in [chars]

Explanation An invalid status code has been passed to a buffer-deletion routine. The buffer will be correctly returned to the free pool, but will not be correctly counted in the per-protocol statistics.

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

Error Message

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

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

Recommended Action If this messages recurs, copy it 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 messages recurs, copy it exactly as it appears and report it to your technical support representative.

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 corrupt.

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]

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

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

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

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

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

%SYS-3-BADPRINT: Process has no associated tty (in [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

%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-BADSHARE: Bad refcount in [chars], ptr=[hex], count=[hex]

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

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

Explanation An internal software error occurred.

Recommended Action If this message recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

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

Explanation This is an auxiliary message to several memory-related messages. It provides a formatted display of some of the information in the header of a corrupted data block.

Recommended Action This message provides additional information only. Copy the error message exactly as it appears, and report it to your technical support representative as part of the previously printed error message.

Error Message

%SYS-2-BLOCKHUNG: Task hung with blocking disabled, value = 0x[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

%SYS-6-BOOT_MESSAGES: Messages above this line are from the boot loader

Explanation At least one informational or error message was printed by the boot loader.

Recommended Action If the system image was loaded, no action is recommended. If the system image did not load as configured, send a log file and configuration information to your technical support representative.

Error Message

%SYS-2-CFORKBADFUNCT: Can't create process with start address = [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

%SYS-2-CFORKLEV: Process creation of [chars] failed (at level [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

%SYS-2-CFORKMEM: Process creation of [chars] failed (no memory)

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 free list 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 nonchunk memory, 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-CHUNKLOCK: Attempted to lock unlockable chunk data, 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-CHUNKPARTIAL: Attempted to destroy partially full chunk, chunk [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-CHUNKSIBLINGS: Attempted to destroy chunk with siblings, chunk [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-5-CONFIG: Configured from [chars] by [chars] [chars]

Explanation The router's configuration was changed.

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

Error Message

%SYS-2-CONFIG_DOWNFAIL: Generated configuration not backward compatible

Explanation The router has been configured to generate nonvolatile memory using the commands of an older software version. The current configuration of the router contains a command that cannot be saved using only the older command set.

Recommended Action Allow the router to save the configuration using the command set of the current software version, or remove the commands that cannot be saved using the older command set.

Error Message

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

Explanation The router's configuration was changed.

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

Error Message

%SYS-4-CONFIG_NEWER: Configuration from version [dec].[dec] may not be correctly understood

Explanation The software detected that the configuration saved in memory was written by a newer version of software. There might be commands saved in memory that are not implemented by the older software version.

Recommended Action Examine all the messages printed while the router was booting. For each message about an unknown command, determine whether that feature is required. If so, upgrade to a newer version of software that supports that feature.

Error Message

%SYS-4-CONFIG_NOLOCK: The configuration could not be locked

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: Nonvolatile storage configured from [chars] by [chars] [chars]

Explanation The configuration was written successfully.

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

Error Message

%SYS-3-CONFIG_NV_ERR: Nonvolatile storage write error; configuration failed

Explanation The write of the nonvolatile configuration failed.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

%SYS-3-CPUHOG: Task ran for [dec] msec ([dec]/[dec]), process = [chars], PC = [hex]

Explanation The indicated process ran too long without relinquishing the processor.

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 because of 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-FREEBAD: Attempted to free memory at [hex], not part of buffer pool

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

%SYS-2-FREEFREE: Attempted to free unassigned memory at %lx, alloc %lx, dealloc %lx

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

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

Explanation The software requested a buffer that is larger than the largest configured buffer size, or it requested a negative-sized buffer.

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

Error Message

%SYS-2-GETBUFFFFAIL: [chars] buffer allocation ([dec] bytes) failed from [hex]

Explanation An operation could not be accomplished because of a low-memory condition. The current system configuration, network environment, or possibly a software error might have exhausted or fragmented the router's memory.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

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

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

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

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

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

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

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

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-INTPRINT: Illegal printing attempt from interrupt level

Explanation A 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-INTSCHED: '[chars]' at level [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

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

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it 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 use 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 messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

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

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

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

Explanation The router is configured to crash when total available memory drops below a specified threshold. That threshold has been reached.

Recommended Action It might be necessary to free some memory by exiting a program. If this message recurs, call 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 is an auxiliary message to several memory-related messages. It provides a raw display of the information in the header of a corrupted data block.

Recommended Action This message provides additional information only. Copy the error message exactly as it appears, and report it to your technical support representative as part of the previously printed error message.

Error Message

%SYS-3-MGDTIMER: [chars] [chars], timer = [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-3-MSGLOST: [dec] messages lost because of 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 ADDRPC ADDRPC ADDRPC ADDRPC ADDRPC ADDRPC ADDRPC ADDRPC

Explanation This is an auxiliary message to several memory-related messages. It provides the address of the memory block and the calling program counter for the last eight blocks allocated and for the last eight blocks freed.

Recommended Action This message provides additional information only. Copy the error message exactly as it appears, and report it to your technical support representative as part of a previously printed error message.

Error Message

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

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-6-NOBRIDGE: Bridging software not present

Explanation Your system is not configured to be a bridge.

Recommended Action Configure the bridging software.

Error Message

%SYS-2-NOMEMFRG: Memory fragmentation check debug exception (fragment size [int])

Explanation The router is configured to crash when the largest available contiguous memory block drops below a specified threshold. That threshold has been reached.

Recommended Action It might be necessary to free some memory by exiting a program. If this message recurs, call your technical support representative for assistance.

Error Message

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

Explanation An operation could not be accomplished because of a low-memory condition. The current system configuration, network environment, or possibly a software error might have exhausted or fragmented the router's memory.

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

Error Message

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

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

%SYS-2-NOTDEAD: Killing process [chars], pid [dec] again

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

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

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

%SYS-3-NULLIDB: Null IDB in [chars]

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

%SYS-3-NZREFCNT: Block [hex] on free list [dec] with refcount [dec]

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

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

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

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

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

Error Message

%SYS-3-OVERRUN: Block overrun at [hex] (red zone [hex])

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

%SYS-1-OVERTEMP: System detected OVERTEMPERATURE condition. Please resolve cooling problem immediately!

Explanation The environmental monitor detected a high-temperature condition.

Recommended Action Ensure that the room temperature is not too high and that air flow to the card is not blocked. If this condition persists, the environmental monitor might shut down the system. Call your technical support representative for assistance, if necessary.

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 identifies the process or process fragment that was executing when the error occurred.

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 [chars] [hex] count [dec]

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

%SYS-4-REGEXP: [chars]

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

%SYS-5-RELOAD: Reload requested

Explanation A reload or restart was requested.

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

Error Message

%SYS-4-RELOAD_ATTEMPT: Attempt via SNMP failed, system shutdown not configured

Explanation SNMP cannot be used to reload the router unless this functionality has been previously configured. This message reports that an attempt to reload the router failed because SNMP reloads are not currently configured on the router.

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

Error Message

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

Explanation A reload or restart was requested.

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

Error Message

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

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

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

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it 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-4-SNMP_HOSTCONFIGSET: SNMP hostConfigSet request. Loading configuration from [int]

Explanation SNMP is reading the host configuration from a network host.

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

Error Message

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

Explanation SNMP is reading the network configuration from a network host.

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

Error Message

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

Explanation SNMP is writing the current configuration to a network host.

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

Error Message

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

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

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

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

Error Message

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

Explanation An internal software error occurred.

Recommended Action If this messages recurs, copy it 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 corrupt.

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 identifies the process or process fragment that was executing when the error occurred.

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]

Explanation The indicated callback routine ran for too long without relinquishing the processor.

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])

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-WATCHDOG: Process aborted on watchdog timeout, process = [chars].

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

Recommended Action If this messages recurs, copy it exactly as it appears and report it to your technical support representative.

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 messages recurs, copy it exactly as it appears and report it to your technical support representative.

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 System Management Remote Procedure Call operation failure. Request for information from the CIP card will not be processed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

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

Explanation System Management Remote Procedure Call Network management event error detected.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco 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 [int] timed out
```

Explanation A background TACACS notification (enabled with the **tacacs notify** command) 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 caused by an internal software problem.

Recommended Action If this message recurs, call 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] DA [sci_notation]
SA [sci_notation] [0x[hex]]

Explanation A packet was received that exceeds the expected maximum transmission unit (MTU) length for the receiving interface. The first 4 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: [chars] received on [chars] - invalid media for
transparent 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-NOVCDROP: Destination VC unknown for packet

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

Recommended Action Clear the bridge table to force relearning of all addresses.

Error Message

%TBRIDGE-4-NOVCFLOOD: No VC's configured for bridging on [chars]

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]

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 because of either misconfiguration or security weaknesses.

Error Message

```
%TCP-2-BADQUEUE: Multiple entry for packet [hex]
```

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-2-BADREFCNT: Tty[t-line]: Bad refcnt for packet 0x[hex] during retransmit,  
[chars]:[dec] to [chars]:[dec], state [dec]
```

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-2-BUFFER: Tty[t-line], buffering bug
```

Explanation An internal software error occurred.

Recommended Action If this message recurs, contact your technical support representative.

Error Message

%TCP-2-HALFCLOSE: Tty[t-line], tcp_putbyte() write disabled

Explanation TCP received a packet from a user application after the connection was already half-closed.

Recommended Action Determine which TCP application is still sending after the connection was half-closed.

Error Message

%TCP-6-INTERCEPT: [chars], count ([dec]/[dec]) 1 min [dec]

Explanation The TCP Intercept code has changed state.

Recommended Action This message is for informational purposes, but it may indicate a security problem.

Error Message

%TCP-3-NOTFOUND: Connection info for ([int]:[dec]) = ([int]:[dec]) not found.

Explanation The TCP Intercept code was searching its database for information for a particular connection, but this information was not found.

Recommended Action If this message recurs, copy it down exactly as it appears and contact 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-2-PUTBYTE: Tty[t-line], tcp_putbyte() with blocking disabled

Explanation An internal software error occurred.

Recommended Action If this message recurs, contact 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 is required.

TN Error Messages

Telnet error messages

Error Message

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

Explanation An internal software error occurred.

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

Error Message

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

Explanation An internal software error occurred.

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

Error Message

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

Explanation An internal software error occurred.

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

Error Message

%TR-3-BADBRDGPparms: Unit [dec], bad bridge parameters: bridge_num=[dec], max_rd=[dec] thisring=[dec], targetring=[dec]

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

%TR-3-BADBUFFSIZE: Unit [dec], bad buffersize = [dec]

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

```
%TR-3-BADFIRM: Unit [dec], Tokenring firmware download failed got [hex], expected [hex], at address 0x[hex].[hex]
```

Explanation An internal software error occurred.

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

Error Message

```
%TR-3-BADFIRMTYPE: Unit [dec], bad firmware type code during [chars]. type=[hex], fw=[hex]
```

Explanation An internal software error occurred.

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

Error Message

```
%TR-3-BADFUNC: Unit [dec], bad functional address=0x[hex], ring mode=0x[hex]
```

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

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

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

Recommended Action Check your configuration. Ensure that your XNS 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 ensure that you used the correct ring number. If it is correct, confirm the configuration of all other bridges on the ring to ensure that they are using the same ring number.

Error Message

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

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

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

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

Recommended Action If this message recurs, call your technical support representative for assistance. It will be necessary to determine the hardware unit configuration.

Error Message

%TR-3-DIAGFAIL: Interface [chars] failed init diags (0x[hex]), [chars]

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

Recommended Action Issue a **clear interface** command. If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

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 on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** output, call your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%TR-3-INTFAIL: Unit [dec] interface failure: [hex] [hex] [hex], idb state [dec]
```

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

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

Error Message

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

Explanation An internal hardware or software error occurred.

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

Error Message

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

Explanation An internal hardware or software error occurred.

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

Error Message

```
%TR-2-NOMEMORY: Unit [dec], no memory for [chars]
```

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

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

Error Message

%TR-3-OPENFAIL: Unit [dec], open failed: [chars], [chars]

Explanation The Token Ring interface was unable to insert itself into 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 Cisco technical support representative for assistance.

Error Message

%TR-3-OPENFAIL2: Unit [dec], open failed: check the lobe cable DB-9 connection

Explanation The Token Ring interface was unable to insert itself into the 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 message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

%TR-2-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 exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

%TR-2-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 on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** output, call your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%TR-2-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 on the console or in the system log. Issue the **show tech-support** command to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** output, call your Cisco technical support representative and provide the representative with the gathered information.

Error Message

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

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

%TR-3-SETBRIDGEFAIL: Unit [dec], set bridge failed (code [hex])

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

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

Error Message

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

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco technical support representative.

Error Message

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

Explanation An internal software error occurred.

Recommended Action If the message recurs, copy the error message exactly as it appears on the console or in the system log, and report it to your Cisco 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 No action is required.

Error Message

%TR-6-STATRING: TR[dec]: Ring Status: [chars] [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. Table 5 shows the meaning of each status code.

Recommended Action Check the Token Ring for the indicated condition.

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

Error Message

%TR-3-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 Message

Tunnel error message

Error Message

%TUN-5-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 because of 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 causing this problem can resolve itself as routing protocols converge. If the problem is caused by misconfiguration, the link may oscillate indefinitely.

Recommended Action No action is required.

UCODE Error Messages

Microcode error messages

Error Message

%UCODE-3-BADCHKSUM: Bad checksum in [chars], found 0x[hex] expected 0x[hex]

Explanation The microcode file is corrupted in some way. The checksum computed after reading the file from Flash memory 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 0x[hex] expected 0x[hex]

Explanation The microcode file is corrupted in some way. The checksum computed after reading the file from Flash memory 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.

Recommended Action Certain interface processors will not load properly. Try the **reload** command again. If this message recurs, call 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.

Recommended Action Certain interface processors will not load properly. The router must be reloaded to clear the problem.

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 from [chars] in slot [dec], trying [chars] ucode

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 that 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, system ucode loaded in slot [dec]

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

Recommended Action Issue the **show flash** command to determine if the file is located in Flash memory. 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 connection management (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-RDFAIL: Unable to read ucode file [chars] from flash

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

Recommended Action Issue the **show flash** command to determine whether Flash memory is in use and issue another microcode reload when Flash memory 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 [int].[int] 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 Re-enter your microcode configuration command after confirming the interface type and reload the microcode.

UNIX Error Message

UNIX error message

Error Message

%UNIX-1-SYABORT: System aborted

Explanation The system aborted. Record the output from the following commands:

- show proc mem (repeated twice)
- show memory
- show buffers
- show version
- show running-config

Recommended Action 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-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 malloc 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]

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, do a memory dump up to 128 bytes and the location specified in the error message, and report this information to your technical support representative.

Error Message

%VINES-2-BADTIMER: RTP timer for [chars] was found disabled, and was reset

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

Recommended Action No action is required. The system automatically restarts the timer.

Error Message

%VINES-2-CACHEFAILED: Cannot build cache entry ([dec] bytes) for %#z on [chars]

Explanation VINES fast switching detected that the packet destined to a given address did not have proper encapsulation information or its encapsulation size was too large to fit into the cache.

Recommended Action Verify that the VINES encapsulation and interface-specific mappings for the interface concerned are properly configured. 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. If other encapsulation types are available on the interface, try using them. If this problem is not limited to one or two destinations (but rather occurs with all traffic using the interface), disable VINES fast switching for the interface until you have identified the real cause of the problem.

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 must be allocated, but all 65,535 port numbers are currently in use. Another possible cause is that VINES attempted to add a cache entry, but had no path associated with the destination address. This may cause temporary slow performance to only those stations that have experienced this inconsistency until complete cache entries are added. However, connectivity should not be lost, because all data traffic can still be routed via process-level switching.

Recommended Action Copy the message exactly as it appears, and report it your technical support representative. If the warning message is about IPC port number depletion, use the **show vines ipc** command to check how many IPC ports are currently in use by which services and determine whether the IPC connections are all legitimate. To release IPC ports, issue the **clear vines ipc** command. If the warning message is about vines cache entries, provide the contents of the vines route cache, neighbor, and route tables immediately after the error messages appeared. If the problem persists, issue the **clear vines cache** command, and monitor the router if the situation improves.

Error Message

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

Explanation The 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. If possible, clear the VINES routing table or neighbor table, depending on the table in which the corrupted entry was observed. This will result in a temporary loss of connectivity until the routing or neighbor table is rebuilt.

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 To identify the other router that is using this address, manually inspect each router's configuration. When you have identified the router with the duplicate address, issue the **vines routing recompute** command on both routers, or issue the **enable vines routing** command, specifying specify a unique address. If one of the routers does not support the recompute keyword, disable VINES on that router, issue the **write terminal** command to save the configuration to memory, reboot the router, and then enter the **vines routing** command with a unique VINES address on the offending routers until each router has a unique address.

Error Message

%VINES-2-ENCAPFAILED: Encapsulation failed for %#z via %#z on [chars]

Explanation 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. If this error results in lost connectivity, disable VINES fast switching by issuing the **no vines route-cache** command. Because disabling fast switching will slow network performance, you should issue the **vines route-cache** command to re-enable fast switching as soon as you have identified the cause of the problem. If you cannot identify the cause, contact your technical support representative. Provide the output of the following commands for the destination address and neighboring routers you are using:

- show vines cache
- show vines neighbor
- show vines route

Also provide the output of the **show interface** and **show vines interface** commands for the incoming and outgoing interfaces.

Error Message

%VINES-6-FNNOTFOUND: [chars] service [chars] routine missing [chars] vector

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

Recommended Action Turn on VINES service-level debugging for the service reported in the error message. Copy the debug traces and the error message exactly as they appear, and report them 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. If possible, clear the VINES neighbor table. This will result in a temporary loss of connectivity until all neighbors and routes are relearned.

Error Message

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

Explanation While searching the routing table, the code determined that a pointer that should point to a 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. If possible, clear the VINES routing table. This will result in a temporary loss of connectivity until all routes are relearned.

Error Message

%VINES-6-IPCNOROUTINE: IPC port [dec] registered without an upcall ([chars])

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

Recommended Action Examine the IPC ports currently supported on the router by issuing the **show vines ipc** command, and see whether the reported IPC port is indeed not active. Copy the message exactly as it appears, and report it to your technical support representative along with the output of the **debug vines ipc** command.

Error Message

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

Explanation There were no buffers available to send a VINES service query or reply.

Recommended Action Examine your system's memory and buffer capacity and compare it with current usage. If you notice a substantial discrepancy, monitor your system for possible memory leaks or buffer drainage. Report the problem to your technical support representative, along with the output of the following commands:

- show memory
- show memory processor
- show buffers
- show buffers assigned
- show buffers old

Error Message

```
%VINES-2-NOVENCAP: Encapsulation failed on [chars] for address %#z
```

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

Recommended Action Toggle the problematic interface by issuing the **shutdown** and **no shutdown** interface commands, and then issue the **no vines metric** and **vines metric** commands. If the problem persists, copy the message exactly as it appears, and report it your technical support representative. If possible, turn on and provide interface-specific debug traces, particularly for VINES activities.

Error Message

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

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

Recommended Action Enter the **show vines ipc** command and see whether the reported IPC port has a registered service. Copy the message exactly as it appears, and report it to your technical support representative, if possible, along with output of the **debug vines netrpc** command.

Error Message

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

Explanation There is an inconsistency in the active 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. In addition, provide the output of the **show vines service** command and **debug vines service** traces for the service reported in the error message.

VIP Error Messages

Versatile Interface Processor error messages

Error Message

```
%VIP-3-AFOVERFLOW: Ethernet address filter table full
```

Explanation VIP Ethernet-like interface uses an internal MAC address table to filter incoming packets. Once the table is full, additional address entries are rejected. Any incoming packet with destination address not in the table will be ignored.

Recommended Action The address table is consumed by various protocols (such as PIM or HSRP). If too many HSRP are configured for one interface, the entry could be exhausted. The suggested solution would be to distribute some of those HSRP entries to other Ethernet interface.

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: No MEMD icbs left for PA [dec] Interface [dec]

Explanation No Switch Processor (SP) interrupt control block structure was associated with the port adapter 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.

VPN Error Message

Virtual Private Dialup Network error message

Error Message

```
%VPN-4-REFUSED: Session for [chars] Refused status = [hex]
```

Explanation The remote server refused this session.

Recommended Action Check configuration on the HG or LNS

X25 Error Messages

X.25 error messages

Error Message

```
%X25-3-ADDRESSBAD: Interface [chars], x25 address [chars] subaddress [char] is too long
```

Explanation This message occurs when a subaddress is configured. When this subaddress is combined with the 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 config. retained
```

Explanation The interface's X.25 configuration is not valid. The existing configuration was not changed.

Recommended Action Verify the following: The interface's switched virtual circuit ranges do not overlap; for nonzero values, $lic \leq hic < ltc \leq htc < loc \leq hoc$. (For more information, refer to "Configuring X.25 and LAPB" in the *Wide-Area Networking 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 message recurs, call your technical support representative for assistance.

Error Message

%X25-4-BADUPCALL: Interface [chars], Unexpected call ([chars]) from LLC2
DTE=[hex] [hex] . [hex] [hex] . [hex] [hex] .

Explanation An internal software error occurred.

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

Error Message

%X25-3-COMPERR: Interface [chars] LCI [dec] low-level stac compression error

Explanation A Stacker compression algorithm internal error or shortage of buffer space was encountered during a compression operation. This should never happen.

Recommended Action Report the error to your technical support representative.

Error Message

%X25-4-DEBUG_LCI: LCI deleted at interrupt time

Explanation An internal software error occurred.

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

Error Message

%X25-2-ILLP4: Interface [chars], Illegal state [chars] when P4

Explanation An internal software error occurred.

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

Error Message

%X25-3-INTIMEQ: Interface [chars], LCN [dec] already in timer queue, new time [dec]

Explanation An internal software error occurred.

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

Error Message

%X25-4-LARGEPKSIZE: Interface [chars], [chars] packet sizes [dec]/[dec] too large; lower values will be negotiated

Explanation The interface's default packet sizes or outgoing packet size facility values are too large to be carried by 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 $1031 \text{ bytes} * 8 = 8248$.

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 logical channel number (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

%X25-3-NOLCI: Interface [chars], Delete: lci [dec] not found in [chars] table

Explanation An internal software error occurred.

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

Error Message

%X25-3-NOTFINDBH: Can't find bfe host address [int] to delete

Explanation An internal software error occurred.

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

Error Message

%X25-4-PARTIALMAP: Interface [chars], [chars] encapsulation call from [chars] partially mapped to [chars]

Explanation An incoming X.25 call specified a protocol that was assigned to a multiprotocol map; the virtual circuit (VC) will not be able to carry the full set of protocols specified by the map.

Recommended Action Modify the configuration of the router or the far host to match the encapsulation method used.

Error Message

%X25-5-PBPDBIT: Interface [chars] LCI [dec] PBP Compression does not support X25 D bit

Explanation Compression is not enabled because D-bit support is configured for the LCI.

Recommended Action Reconfigure without D-bit support, or do not attempt to run with compression.

Error Message

%X25-5-PBPHOLDQ: Interface [chars] LCI [dec] X25 Hold queue needs to be at least default size

Explanation An attempt was made to configure the X.25 hold queue to less than the minimum value.

Recommended Action Configure the X.25 hold queue to be ten or more.

Error Message

%X25-5-PBPNOEND: Interface [chars] LCI [dec] End system not configured for X25 PBP

Explanation A compression or decompression operation was attempted by a router other than an end router. Only end routers can perform compression and decompression.

Recommended Action Reconfigure the routers so that only the end routers in the network perform compression and decompression.

Error Message

%X25-3-PVCBAD: Interface [chars], PVC [dec], [chars]

Explanation A switched permanent virtual circuit (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 *Wide-Area Networking Command Reference* publication.

Recommended Action Validate the configuration of the PVCs at both ends of the connection, and reconfigure them if necessary.

Error Message

%X25-4-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 Contact your technical support representative for assistance.

Error Message

%X25-3-SPURD1: Interface [chars], Spurious D1 timer wakeup on LCI [dec]

Explanation An internal software error occurred.

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

Error Message

%X25-3-SYNCBAD: Interface [chars] LCI [dec] Decompression sync error. expected [dec] got [dec]

Explanation An internal software error occurred. The PBP header has a sync field. The sync field (8 bits) is checked on each received packet.

Recommended Action Contact your technical support representative for assistance.

Error Message

%X25-4-VCLOSTSYNC: Interface [chars], VC [dec] TCP connection [chars]

Explanation An X.25 circuit that is being tunneled over a TCP connection between routers was cleared ungracefully. The last [chars] text string in the message can take one of two forms. If the text string is *closed unexpectedly*, the router at the remote end of the connection 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*, re-establish 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 [int]: [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 message recurs, call your technical support representative for assistance.

