



## NIC100 Error Messages

NIC100 driver error messages

### Error Message

`%NIC100-3-BADUNIT: msgtxt_badunit`

**Explanation** An internal software error occurred.

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

### Error Message

`%NIC100-1-INITFAIL: msgtxt_initfail`

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

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

### Error Message

`%NIC100-3-OWNERR: msgtxt_ownership`

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

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

## NIM Error Messages

Network interface module error messages

### Error Message

`%NIM-2-BADNIMREV: Unsupported version of [chars] NIM in slot [dec] Version 0x[hex]`

**Explanation** The indicated network interface module (NIM) is not supported because it is not of the correct revision. Certain platforms (Cisco 4500 or Cisco 4700, for example) require some NIMs to be of a minimum revision level.

**Recommended Action** Upgrade the NIM to the proper level.

**Error Message**

%NIM-2-BADSLOT: Illegal reference to non-existent slot [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**

%NIM-2-BADSUBUNIT: Illegal reference to non-existent subunit [dec] in slot [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**

%NIM-2-DEADICHAINQ: Attempted to manipulate uninitialized ichainQ in [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**

%NIM-2-LOSTICHAINQ: Couldn't find idb 0x[hex] in ichainQ in [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**

%NIM-2-NOHWADDRESS: All hardware addresses have been allocated - maximum of [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**

%NIM-2-UNSUPNIM: Unsupported [chars] NIM in slot [dec]

**Explanation** The indicated NIM is not supported on this platform.

**Recommended Action** Remove the NIM.

# OIR Error Messages

Online insertion and removal error messages

## Error Message

```
%OIR-6-INSCARD: Card inserted in slot [dec], subcard [dec], interfaces  
administratively shutdown
```

**Explanation** The specified hot-swappable card was inserted in the system. The interface(s) on the card will remain administratively disabled until specifically enabled, because they may need to be configured.

**Recommended Action** This is an informational message only. Configure the interface(s) and enable them.

## Error Message

```
%OIR-3-LONGSTALL: Long bus stall ([int] s), the new PAM may not seated properly.  
Please remove it and try again
```

**Explanation** A hot-swappable card that was inserted into the system has failed to respond. The card may not be properly seated.

**Recommended Action** Remove and re-insert the specified card. If the message recurs, copy the error message exactly as it appears on the console or in the system log, call your Cisco technical support representative and provide the representative with the gathered information.

## Error Message

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

**Explanation** This card is capable of online insertion and removal (OIR) but is not capable of extended online insertion and removal (EOIR). Even though no damage would occur to the hardware, insertion or removal of the card will cause a CBUS complex restart, which would be disruptive to traffic on other cards in the system.

**Recommended Action** Try to restrict insertion or removal of this card to instances when a CBUS complex restart will be least disruptive. Or, upgrade the card to the latest revision that supports EOIR.

## Error Message

```
%OIR-6-REMCARD: Card removed from slot [dec], subcard [dec], interfaces disabled
```

**Explanation** The specified hot-swappable card was removed from the system.

**Recommended Action** This is an informational message only. No action is required.

**Error Message**

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

**Explanation** The OIR facility detected an incorrectly seated card, causing the insertion or removal of this card to fail.

**Recommended Action** Reseat the card in the indicated slot.

## OOBP Error Messages

Out of band port error messages

**Error Message**

%OOBP-1-ASYNC\_NO\_RSP: Warning -- reset async oobp no response

**Explanation** An asynchronous driver did not respond to the ASYNC RESET command.

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

**Error Message**

%OOBP-1-OOBP\_CANT\_BE\_USED: Warning -- oobp can't be used

**Explanation** An asynchronous driver cannot send out the oobp message because there is no resource.

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

**Error Message**

%OOBP-1-TIMEOUT\_AT\_WRONG\_STATE: Warning -- OOBP driver timeout at wrong state

**Explanation** OOBP response time-out at wrong OOBP state.

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

## OSPF Error Messages

Open Shortest Path First error messages

**Error Message**

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

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

**Recommended Action** No action is required.

**Error Message**

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

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

**Recommended Action** 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**

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

**Explanation** The router received a link-state advertisement (LSA) with invalid LSA Type. The cause is either memory corruption or unexpected behavior on a router.

**Recommended Action** From a neighboring address, locate the problem router and reboot it. To determine what is causing this problem, call your Cisco technical support representative for assistance.

**Error Message**

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

**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**

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

**Explanation** OSPF has a problem locating the LSA, which could lead to a memory leak.

**Recommended Action** Check for possible routing problems and monitor the router's log for recurrence of this message. If routing problems are discovered, or if the message recurs, upgrade your software version. If the upgrade fails to correct the problem, contact Cisco technical support.

**Error Message**

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

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

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

**Error Message**

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

**Explanation** An internal 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**

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

**Explanation** An internal 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**

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

**Explanation** The router was flagged as an Area Border Router (ABR) without backbone area in the router.

**Recommended Action** Restart the OSPF process.

**Error Message**

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

**Explanation** While calculating OSPF routes, the router could not find the link-state advertisement that represents the connected route in the router.

**Recommended Action** Clear the IP routes in the routing table by entering the **clear ip route** command.

**Error Message**

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

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

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

**Error Message**

%OSPF-2-NOMEMORY: No memory for [chars]

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

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

**Error Message**

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

**Explanation** OSPF hello, database description, or database request packet was received, but the router could not identify the sender.

**Recommended Action** This situation should correct itself. If the message recurs, 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**

%OSPF-4-NORTRID: Could not allocate router ID

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

**Recommended Action** Ensure that at least one interface is up and has a valid IP address. If multiple OSPF processes are running on the router, each process needs its own unique router ID. You must have enough up interfaces so that each of them can obtain a router ID.

**Error Message**

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

**Explanation** An internal 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**

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

**Explanation** OSPF attempted to redistribute a route, but could not find a valid source protocol.

**Recommended Action** No action is required.

**Error Message**

```
%OSPF-6-NOTREDIST1: ex_route_callback(): do not redistribute net [int][inet],
[chars]
```

**Explanation** This message is for information only.

**Recommended Action** No action is required.

**Error Message**

```
%OSPF-6-NOTREDIST3: build_ex_route(): don't redistribute net [int][inet], [int]
advertises it already
```

**Explanation** This message is for information only.

**Recommended Action** No action is required.

**Error Message**

```
%OSPF-4-NOTREDIST4: Database scanner: external LSA [int][inet] is lost, reinstalls
```

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

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may 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**

```
%OSPF-4-NOTREDIST5: db_free: external LSA [int][inet]
```

**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**

```
%OSPF-4-OSPFINTDOWN: Interface [chars] is up but OSPF state is down. Clean up
```

**Explanation** An inconsistency in an internal state was found and corrected.

**Recommended Action** No action is required.

**Error Message**

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

**Explanation** OSPF found inconsistency between its database and IP routing table.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may 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**

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

**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**

%OSPF-4-VIRTUAL\_IN\_NON\_BACKBONE: Virtual link information found in non-backbone area: [chars]

**Explanation** An internal 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**

%OSPF-6-ZERO\_BANDWIDTH: interface [chars] has zero bandwidth

**Explanation** The interface reports its bandwidth as zero.

**Recommended Action** No action is required.

## PA Error Messages

Port adapter error messages

**Error Message**

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

**Explanation** The port adapter system control block (PASCB) data structure indicates a zero interface descriptor block (IDB).

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

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

**Error Message**

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

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

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may 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**

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

**Explanation** The port adapter is being powered off.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may 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**

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

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

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

**Error Message**

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

**Explanation** The system side PCI bridge for this PA failed initialization. The PA will not be operational.

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

**Error Message**

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

**Explanation** This message indicates a possible memory shortage or adaptor hardware error.

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

**Error Message**

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

**Explanation** While getting the daughter card information for the chassismib, the platform SNMP code went into an infinite loop.

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

**Error Message**

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

**Explanation** An attempt was made to register an interrupt handler for either a non-existent port adaptor or the wrong interrupt priority level.

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

**Error Message**

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

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

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

**Error Message**

%PA-2-UNDEFPABRIDGE: Unsupported Port Adapter Bridge [hex] in bay [dec]

**Explanation** The software does not have a driver for the port adapter protocol control information bridge in the specified bay.

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

## PAD Error Messages

X.25 packet assembler/disassembler error messages

**Error Message**

%PAD-3-GETLINE: Tty[t-line], bad return code [dec] from x3\_getline()

**Explanation** An internal software error occurred.

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

**Error Message**

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

**Explanation** An internal software error occurred.

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

**Error Message**

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

**Explanation** An internal software error occurred.

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

# PARSER Error Messages

Parser error messages

## Error Message

%PARSER-4-BADCFG: Unexpected end of configuration file

**Explanation** This message occurs when a configuration is read from the Trivial File Transfer Protocol (TFTP) server or nonvolatile RAM (NVRAM) and the end of the file is encountered before the end statement. The configuration may be corrupted or incomplete. What was read is in effect.

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

## Error Message

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

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

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

## Error Message

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

**Explanation** The parser failed an internal software check.

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

## Error Message

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

**Explanation** The parser failed an internal software check.

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

## Error Message

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

**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**

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

**Explanation** The parser failed an internal software check.

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

**Error Message**

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

**Explanation** An error occurred.

**Recommended Action** Copy the error message exactly as it appears. Execute a **show version** command, and copy the displayed information. Contact your technical support representative.

**Error Message**

%PARSER-4-LINKPOINT: Parser reached link\_point

**Explanation** The parser failed an internal software check.

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

**Error Message**

%PARSER-4-MULFUNCS: unknown test in test\_multiple\_funcs '[char]'

**Explanation** The parser failed an internal software check.

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

**Error Message**

%PARSER-4-MULTIPLEIFS: interface\_action: multiple ifs present when unit\_only set

**Explanation** The parser failed an internal software check.

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

**Error Message**

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

**Explanation** The parser failed an internal software check.

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

**Error Message**

%PARSER-4-NUMHELP: general\_number\_short\_help: Invalid [chars] number flag

**Explanation** The parser failed an internal software check.

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

**Error Message**

%PARSER-4-NVGEN: nvgen\_token called but csb-nvgen not set

**Explanation** The parser failed an internal software check.

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

**Error Message**

%PARSER-4-PROTOADDR: protoaddr\_action: Unknown link\_type [dec]

**Explanation** The parser failed an internal software check.

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

## PERUSER Error Message

PPP per-user configuration error message

**Error Message**

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

**Explanation** The configuration cannot be applied to individual ISDN channels.

**Recommended Action** You need virtual profiles and virtual access interfaces in order to apply the configuration to ISDN. Refer to the *Dial Solutions Configuration Guide* for information on virtual profiles.

## PIM Error Messages

Protocol-independent multicast error messages

**Error Message**

`%PIM-1-INVALID_RP_JOIN: Received (*, [int]) Join from [int] for invalid RP [int]`

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

**Recommended Action** Configure all downstream leaf routers to join to the RP that is allowed by upstream routers toward the validated rendezvous point.

**Error Message**

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

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

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

## PNNI Error Messages

Private Network-Network Interface error messages

**Error Message**

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

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

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

**Error Message**

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

**Explanation** An internal software error occurred.

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

**Error Message**

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

**Explanation** An invalid packet was received from a network peer.

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

**Error Message**

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

**Explanation** A source routing request by another network host was corrupted.

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

**Error Message**

%PNNI-4-CONFIG\_ERROR: Configuration Error: [chars]

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

**Recommended Action** Change the configuration to correct the error.

**Error Message**

%PNNI-7-DEBUG: [chars]

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

**Recommended Action** Informational messages can be disabled by changing the logging level.

**Error Message**

%PNNI-4-DUPLICATE\_NODE\_ID: [chars] [chars] for node [dec] [chars]

**Explanation** An internal software error occurred.

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

**Error Message**

%PNNI-3-INTERNAL\_ERROR: [chars] [chars] [hex]

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

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

**Error Message**

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

**Explanation** An internal software error occurred.

**Recommended Action** Use the **show atm pnni trace error** command to collect more information. If the message recurs, copy the error message exactly as it appears on the console or in the system log, call your Cisco technical support representative and provide the representative with the gathered information.

**Error Message**

%PNNI-2-NO\_INTERNAL\_NUMBER: Empty Internal Number Stack: [chars]

**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**

%PNNI-2-SPF\_ERROR: Tent List Overflow in [chars]

**Explanation** An internal software error occurred.

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

## POSDW Error Messages

Packet over SONET double wide PCI port adapter driver error messages

**Error Message**

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

**Explanation** The POSDW hardware failed. An incorrect number of interfaces was discovered.

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

**Error Message**

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

**Explanation** The POSDW port adaptor failed to complete hardware initialization.

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

**Error Message**

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

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

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

**Error Message**

%POSDW-3-OWNERR: [chars] packet buffer, pak=0x[hex]

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

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

## PPP Error Messages

Point-to-Point Protocol error messages

**Error Message**

%PPP-4-IPXNET: mismatched IPX network numbers. Ours = [hex], theirs = [hex]

**Explanation** The two ends of a serial link have different IPX network numbers.

**Recommended Action** Confirm the configuration of both devices.

**Error Message**

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

**Explanation** A Multilink PPP bundle was not appointed. This error message is most likely to be caused by no memory being available.

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

**Error Message**

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

**Explanation** A Multilink PPP bundle was not cleared. This error message is most likely to be caused by no memory being available.

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

**Error Message**

%PPP-4-NOEXTTACACS: ppp TACACS is configured but extended TACACS is not

**Explanation** PPP was configured to use the Terminal Access Controller Access Control System (TACACS), but extended TACACS was not configured or was disabled.

**Recommended Action** Either issue the **no ppp use-tacacs** command to stop PPP from using TACACS, or issue the **tacacs-server extended** command to enable extended TACACS.

**Error Message**

%PPP-4-NOMAC: Lex ncp: no free Lex interface found with MAC address [sci\_notation]

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

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

**Error Message**

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

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

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

**Error Message**

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

**Explanation** This error message should never occur in normal operation.

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

## PQUICC Error Messages

MPC860 quad integrated communications controller error messages

**Error Message**

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

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

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

**Error Message**

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

**Explanation** The clear to send (CTS) input signal on a data terminal equipment (DTE) serial interface became inactive while transmitting a frame. This problem is a result of a communication line failure or cable disconnection.

**Recommended Action** Check the serial interface cable and/or communication equipment, such as the channel service unit/data service unit (CSU/DSU).

**Error Message**

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

**Explanation** The software failed to initialize or restart a IT serial card.

**Recommended Action** Clear the serial interface. If the message recurs, call your technical support representative for assistance.

**Error Message**

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

**Explanation** The system received too many modem control signal interrupts. Modem control signals are hardware handshake signals between data terminal equipment (DTE) and data communications equipment (DCE). The signals include either a data carrier detect (DCD) or a data set ready (DSR), or both DCD and DSR.

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

**Error Message**

%PQUICC-1-NOMEMORY: msgtxt\_nomemory

**Explanation** The MPC860/PowerQUICC CPU was unable to access the memory it needs to carry out its functions. Here are some possible causes:

- The network is large, requiring a lot 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.

#### Error Message

%PQUICC-3-OWNERR: msgtxt\_ownerror

**Explanation** An internal software error occurred.

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

#### Error Message

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

**Explanation** A packet greater than the assigned MTU of this serial interface was queued for transmission.

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

#### Error Message

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

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

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

#### Error Message

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

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

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

**Error Message**

%PQUICC-1-UNEXPECTED\_INTERRUPT: PQUICC([dec]), Unexpected modem-signal interrupt

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

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

**Error Message**

%PQUICC-3-UNKNOWN\_SCCS: PQUICC, Incorrect SCC number

**Explanation** An internal software error occurred.

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

**Error Message**

%PQUICC-1-UNKNOWN\_WIC: PQUICC([dec]), WIC card has an unknown ID of 0x[hex]

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

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

**Error Message**

%PQUICC-1-UNSUPPORTED\_CONFIG: Slot [dec] has an unsupported combination of ISDN WAN interface cards

**Explanation** It is not possible to support this type of BRI card in slot 1 with another BRI card in slot 0.

**Recommended Action** Remove one of the BRI cards from either slot.

**Error Message**

%PQUICC-1-WRONG\_SLOT: PQUICC([dec]), BRI card in wrong slot(1)

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

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

## PS Error Messages

Power supply error and debug messages.

**Error Message**

```
%PS-3-MULTFAIL T There is more than one failure with the Power System
```

**Explanation** The power system experienced multiple failures. This is a critical condition.

**Recommended Action** There are multiple failures on the power supply. Read the LEDs on the front of the power supply to determine which failures have occurred.

## QA Error Messages

Queue and accumulator error messages

**Error Message**

```
%QA-3-ALLOC: [chars]
```

**Explanation** This is a software error.

**Recommended Action** Copy the error message exactly as it appears. Also copy the output of the **show version** and **show controllers cbus** commands. Contact your technical support representative.

**Error Message**

```
%QA-3-DIAG: NULL
```

**Explanation** This is a diagnostic message.

**Recommended Action** This message appears after a QA error, and contains diagnostic information regarding that error. Copy the original QA error message and all the following QA diagnostic error messages exactly as they appear. Also copy the output of the **show version** and **show controllers cbus** commands. Contact your technical support representative.

## QEM Error Message

QEM error message

**Error Message**

```
%QEM-3-DISCOVER: Found [chars] switch processors
```

**Explanation** The QEM driver either found no switch processors or more than one. Exactly one is the only supported configuration.

**Recommended Action** Ensure that there is only one switch processor.

## QLLC Error Messages

Qualified Logical Link Control error messages

**Error Message**

%QLLC-3-BADOPCODE: Opcode [chars] is invalid

**Explanation** Either remote source-route bridging or local acknowledgment is configured incorrectly.

**Recommended Action** Verify that remote source-route bridging and local acknowledgment are configured correctly.

**Error Message**

%QLLC-3-BADQLLCSTATE: Bad qllc state - [chars]

**Explanation** An invalid QLLC primitive was detected.

**Recommended Action** Verify that the partner QLLC device is configured correctly.

**Error Message**

%QLLC-3-BADRSRBOPCODE: Bad opcode [hex] from [sci\_notation] to [sci\_notation]

**Explanation** Either remote source-route bridging (RSRB) is incorrectly configured, or the other RSRB device is down.

**Recommended Action** Verify that remote source-route bridging is configured correctly with the right version of the Cisco IOS software.

**Error Message**

%QLLC-3-BADSTATE: Bad qllc state - [chars] - [sci\_notation]

**Explanation** An invalid LLC primitive was detected.

**Recommended Action** Verify that the Token Ring ports and any participating LAN devices are configured correctly.

**Error Message**

%QLLC-3-BADSTATEEVENT: Bad qllc state - [chars] event - [chars] macaddr - [sci\_notation]

**Explanation** The LLC primitive specified placed the router in an invalid state.

**Recommended Action** Verify that the Token Ring ports and any participating LAN devices are configured correctly.

**Error Message**

%QLLC-3-BAD\_XID: Sna configuration error for [sci\_notation]: Lan device is PU2.1, X.25 device is PU2.0 (XID Format 1)

**Explanation** The IBM Gateway (3172) or front-end processor on the LAN is sending XID Format 3, which is used to communicate with PU2.1 devices. The X.25 device is a PU2.0 (3174) that is configured to send XID Format 1 messages. This is a very rare situation. A likely cause is that the revision levels on the IBM equipment are incompatible.

**Recommended Action** Check the revision levels on the external equipment, and upgrade them if necessary.

**Error Message**

%QLLC-3-DIFFPRTR: [sci\_notation] - Different partner - originally [sci\_notation] - now [sci\_notation]

**Explanation** The partner for this QLLC virtual MAC address does not match the MAC address that was defined with the **qlc partner** command.

**Recommended Action** Verify that the **qlc partner** statement in the configuration file is correct.

**Error Message**

%QLLC-3-GENERRMSG: [chars]

**Explanation** The text string provided with this error message describes the specific QLLC problem.

**Recommended Action** Follow the instructions that appear with the error message. Copy the error message exactly as it appears, and report it to your technical support representative.

**Error Message**

%QLLC-3-IFRAME: [chars]

**Explanation** An I-Frame was discarded because of network congestion.

**Recommended Action** Verify that the LAN is not beaconing and that it is not in a congested state. Copy the error message exactly as it appears, and report it to your technical support representative.

**Error Message**

%QLLC-3-INCALL\_CFG: Incoming call: No QLLC Service Access Point Configured for x.25 subaddress [chars]

**Explanation** A remote X.25 device is calling the router for QLLC service using a subaddress that was not configured by the X.25 routing facility. The subaddress was not configured for QLLC service.

**Recommended Action** Correct the QLLC configuration. Configure only the subaddress on the QLLC service, not the complete X.121 address that the remote X.25 device uses.

**Error Message**

%QLLC-3-INCALL\_NO\_PARTNER: Incoming call: No partner Mac Address configured - X.25 subaddress [chars]

**Explanation** There is an incoming call, but a connection cannot be initiated to a partner since no partner is configured in a **qlc dls** command (for QLLC/DLSw+ only).

**Recommended Action** Configure a partner for the incoming call (such as by using the **qlc dls partner** command).

**Error Message**

%QLLC-3-LNXNOTFOUND: lnx\_remove\_macaddr\_hash did not find target lnx

**Explanation** The **qlc srb** command was not defined for this interface.

**Recommended Action** Add a valid **qlc srb** statement for this serial interface.

**Error Message**

%QLLC-3-NOLLC2: Unable to open an llc2 session

**Explanation** An LLC2 session could not be established with the destination MAC address.

**Recommended Action** Verify that the **qlc partner** statement in the configuration file is correct, and that the partner is on the desired LAN.

**Error Message**

%QLLC-3-NOMACADDR: No lnx entry for macaddr [sci\_notation]

**Explanation** No virtual MAC address was defined for this interface.

**Recommended Action** Define the virtual MAC address, using either the **x25 map qlc** or the **x25 pvc qlc** command.

**Error Message**

%QLLC-3-NOMEM: Not enough memory available

**Explanation** There is not enough memory in the system to complete this request.

**Recommended Action** Add more memory to the router. Otherwise, reduce the configuration or the load on the router.

**Error Message**

%QLLC-3-NONULLXID: Couldn't make null xid - [sci\_notation] -[sci\_notation]

**Explanation** An attempt to create an IEEE XID failed.

**Recommended Action** Verify that the **qlc partner** statement in the configuration file is correct, and that the partner is on the desired LAN.

**Error Message**

%QLLC-3-NOPAKENQ: Pak enqueue failed

**Explanation** A packet was not sent to the LAN.

**Recommended Action** Verify that the LAN partner is configured correctly, and that the partner is on the desired LAN.

**Error Message**

%QLLC-4-NOQLLC: Unable to open qllc session, current state is [chars]

**Explanation** A QLLC session could not be established.

**Recommended Action** Verify that the **qllc partner** and the **qllc xid** commands are correct.

**Error Message**

%QLLC-3-NO\_QLLCBUFFER: M bit Reassembly failed - couldn't allocate a packet

**Explanation** The router ran out of memory to allocate buffers.

**Recommended Action** Ensure that the router configuration is adequate for the service expected of it. You might want to tune the buffer pools, or upgrade to a larger router. At the very least, you will need more memory.

**Error Message**

%QLLC-3-NO\_QSR: No QLLC Service Access Points defined

**Explanation** No QLLC services have been configured, even though the router will accept incoming calls for QLLC.

**Recommended Action** Configure the QLLC service required.

**Error Message**

%QLLC-3-NO\_RESOURCE: Incoming Call: Insufficient resources available

**Explanation** This message is reporting insufficient system memory.

**Recommended Action** Upgrade the memory.

**Error Message**

%QLLC-3-NOXID2: Couldn't make xid - [sci\_notation] -[sci\_notation]

**Explanation** The QLLC XID could not be forwarded to the LAN.

**Recommended Action** Verify that the **qllc partner** and the **qllc xid** commands are correct.

**Error Message**

%QLLC-3-NULLPTR: [chars] ptr is null

**Explanation** The specified structure was not configured.

**Recommended Action** Confirm the configuration commands for the structure.

**Error Message**

%QLLC-3-PARTNER\_MISMATCH: Outgoing call: Partner Mac Address [sci\_notation] doesn't match configured partner [sci\_notation]

**Explanation** A device tried to connect to a QLLC VMAC, but the MAC address of that device does not match the partner in the **qllc dlsw** command.

**Recommended Action** Correct the QLLC configuration to match the right partner.

**Error Message**

%QLLC-3-QLLCMAP\_ERR: Incoming call: QLLC map entry not found

**Explanation** A software error in the router code occurred.

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

## QUICC Error Messages

MC68360 quad integrated communications controller error messages

**Error Message**

%QUICC-1-NOMEMORY: msgtxt\_nomemory

**Explanation** The MC68360/QUICC 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.

**Error Message**

%QUICC-3-OWNERR: msgtxt\_owerror

**Explanation** An internal software error occurred.

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

**Error Message**

%QUICC-3-UCODE\_REV\_UNKN: Unknown microcode revision number: [dec]

**Explanation** The MC68360/QUICC CPU was running an unexpected version of microcode. This could be possible if a new version of the QUICC chip was released or if a very old version was used in the manufacturing process. This could also occur if a new version of microcode was released to fix any bugs.

**Recommended Action** A decrease in performance might occur for any asynchronous interfaces running PPP. Call your technical support representative if this is an issue.

## QUICC\_ASYNC Error Message

Asynchronous MC68360 quad integrated communications controller error message

**Error Message**

%QUICC\_ASYNC-3-CTSLOST: Unit [dec], Clear to Send Lost

**Explanation** The clear to send (CTS) input signal on a data terminal equipment (DTE) serial interface became inactive while transmitting a frame. This problem is a result of a communication line failure or cable disconnection

**Recommended Action** Check the serial interface cable and/or communication equipment, such as the channel service unit/data service unit (CSU/DSU).

## QUICC\_ETHER Error Messages

Ethernet MC68360 quad integrated communications controller error messages

**Error Message**

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

**Explanation** An Ethernet cable is broken or unterminated.

**Recommended Action** Check cables for proper connections, termination, and so on.

**Error Message**

%QUICC\_ETHER-5-HBEAT: Unit [dec], heartbeat check failure

**Explanation** The Ethernet cable might be too long, or there could be too many repeaters such that the delay from one end to the other is too long. The Ethernet cable might be overloaded with too many users.

**Recommended Action** Verify that your Ethernet cable is the correct length and that you do not have too many repeaters in use. If these are not the problem, try removing hosts from the Ethernet segment to reduce the load.

**Error Message**

%QUICC\_ETHER-1-INITFAIL: msgtxt\_initfail

**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**

%QUICC\_ETHER-5-LATECOLL: Unit [dec], late collision error

**Explanation** The Ethernet cable might be too long, or there could be too many repeaters such that the delay from one end to the other is too long. The Ethernet cable might be overloaded with too many users.

**Recommended Action** Verify that your Ethernet cable is the correct length and that you do not have too many repeaters in use. If these are not the problem, try removing hosts from the Ethernet segment to reduce the load.

**Error Message**

%QUICC\_ETHER-1-LOSTCARR: Unit [dec], lost carrier. Transceiver problem?

**Explanation** The Ethernet 10BaseT cable is unplugged.

**Recommended Action** Connect the 10BaseT Ethernet cable.

**Error Message**

%QUICC\_ETHER-3-UNDERFLO: Unit [dec], underflow error

**Explanation** While transmitting a frame, the Ethernet controller chip's local buffer received insufficient data because data could not be transferred to the chip fast enough to keep pace with its output rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

**Recommended Action** The system should recover. No action is required. If the problem recurs, it indicates a hardware error that might be related to data traffic patterns. Copy the error message exactly as it appears, and report it to your technical support representative.

## QUICC\_SERIAL Error Messages

Serial MC68360 quad integrated communications controller error messages

**Error Message**

%QUICC\_SERIAL-3-CTSLOST: Unit [dec], Clear to Send Lost

**Explanation** The Clear To Send (CTS) input signal on a data terminal equipment (DTE) serial interface became inactive while transmitting a frame. This problem stems from a communication line failure or cable disconnection.

**Recommended Action** Check the serial interface cable and or communication equipment such as the channel service unit/data service unit (CSU/DSU).

**Error Message**

%QUICC\_SERIAL-1-INITFAIL: msgtxt\_initfail

**Explanation** The serial interface controller of the QUICC chip could not be initialized or started for operation. There is probably a hardware problem.

**Recommended Action** Power cycle the system. If the error reoccurs, replace the unit.

**Error Message**

%QUICC\_SERIAL-5-LINEFLAP: Unit [dec], excessive modem control changes

**Explanation** The system received too many modem control signal interrupts. Modem control signals are hardware handshake signals between data terminal equipment (DTE) and data communications equipment (DCE). The signals include either a data carrier detect (DCD) or a data set ready (DSR), or both a DCD and a DSR.

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

**Error Message**

%QUICC\_SERIAL-5-LOSTCARR: Unit [dec], carrier detect signal lost during message reception

**Explanation** The RS-232C Carrier Detect (DCD) signal was de-asserted during message reception. The DCE equipment is responsible for asserting this signal.

**Recommended Action** Check the serial interface cable. The error can occur if the cable is disconnected.

**Error Message**

%QUICC\_SERIAL-3-UNDERFLO: Unit [dec], underflow error

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

**Recommended Action** The system should recover. No action is required. If the problem recurs, it indicates a hardware error that might be related to data traffic patterns. Copy the error message exactly as it appears, and report it to your technical support representative.

## RADIUS Error Messages

RADIUS facility error messages

**Error Message**

%RADIUS-3-ALLDEADSERVER: No active radius servers found. Id [dec]

**Explanation** All RADIUS servers were found to be unresponsive. This message appears only if the **radius-server deadtime** command has been entered to cause unavailable servers to be immediately skipped and will not reappear, even if all servers are unavailable, until the RADIUS-6-SERVERALIVE message shows a RADIUS server to be available.

**Recommended Action** Check the network connectivity to the RADIUS servers, and ensure that the servers are running. When a server is responding, the %RADIUS-6-SERVERALIVE message will be received.

**Error Message**

%RADIUS-3-FORKFAIL: Failed to fork process for [chars]

**Explanation** Quite likely, the system ran out of memory. Other explanations are possible.

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

**Error Message**

%RADIUS-6-GETPOOLS: Retrieving IP-Pools via user [chars]

**Explanation** Initial IP-Pool definitions are being retrieved from RADIUS using the given user's profile.

**Recommended Action** No action is required.

**Error Message**

%RADIUS-6-GETROUTES: Retrieving static routes in user [chars]

**Explanation** Initial static routes are being retrieved from RADIUS using the given user's profile.

**Recommended Action** No action is required.

**Error Message**

%RADIUS-3-IDENTFAIL: Save of unique accounting ident aborted. Configuration has been modified

**Explanation** Since the configuration has been modified, the unique accounting IDENT cannot be saved to NVRAM.

**Recommended Action** Save the configuration and try again. If the error persists, call your technical support representative for assistance.

**Error Message**

%RADIUS-6-IDENTSAVE: Saving config with new acct ident in nvram

**Explanation** Saving an accounting ident in NVRAM.

**Recommended Action** No action is required.

**Error Message**

%RADIUS-3-NOHOSTNAME: Failed to retrieve my hostname

**Explanation** Could not find the router's hostname. A hostname must be defined, since it determines the RADIUS profile to be retrieved.

**Recommended Action** Define a hostname in the router's configuration.

**Error Message**

%RADIUS-3-NOSERVERS: No Radius hosts configured

**Explanation** RADIUS is attempting to send a request, but there are no hosts configured to send the request to.

**Recommended Action** Configure a host using the **radius-server** command.

**Error Message**

%RADIUS-6-SERVERALIVE: Radius server [int] is responding again (previously dead)

**Explanation** A RADIUS server that was previously inactive has started responding again. This message follows the %RADIUS-3-ALLDEADSERVER command and shows that a server has become available after previously being unavailable.

**Recommended Action** No action is required.

# RADIX Error Messages

RADIX error messages

## Error Message

%RADIX-3-ADDMASK: Error adding mask entry, [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

%RADIX-3-BADTREE: Invalid pointer to head of tree, 0x[hex]

**Explanation** A software programming error occurred.

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

## Error Message

%RADIX-3-DELETE: Error deleting trie entry, [chars]

**Explanation** A software programming error occurred.

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

## Error Message

%RADIX-2-INIT: No memory for radix initialization: [chars]

**Explanation** The system ran out of memory during initialization. This should only occur if an image is too large for the existing dynamic memory.

**Recommended Action** Use a smaller subset image or upgrade hardware.

## Error Message

%RADIX-3-NOMEMORY: No memory available [chars]

**Explanation** The system is out of memory.

**Recommended Action** To correct the problem, reduce the number of routes accepted by this router, upgrade hardware, or use a smaller subset image on run-from-RAM platforms.

**Error Message**

%RADIX-4-ORPHAN: Orphaned mask [hex], refcount=[dec] at [hex], next=[hex]

**Explanation** A software error occurred.

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

## RCMD Error Messages

Remote command error messages

**Error Message**

%RCMD-4-RCMDDNSFAIL: DNS hostname/ip address mismatch. [int] unknown to DNS

**Explanation** The IP address for an incoming rcmd request is not registered with Domain Naming System (DNS).

**Recommended Action** Add the IP address to DNS.

**Error Message**

%RCMD-4-RCPATTEMPTED: Remote copy from [chars] at [chars] denied

**Explanation** An attempt was made to connect to a router through remote copy protocol (rcp), but the router was not configured as an rcp server.

**Recommended Action** Configure an rcp server.

**Error Message**

%RCMD-4-RSHATTEMPTED: Remote shell from [chars] at [chars] denied

**Explanation** An attempt was made to connect to a router through remote shell protocol (rsh), but the router was not configured as an rsh server.

**Recommended Action** Configure an rsh server.

**Error Message**

%RCMD-4-RSHPORTATTEMPT: Attempted to connect to RSHELL from [int]

**Explanation** An attempt was made to connect to a router through the rshell port (514), but the router was not configured as an rsh or rcp server.

**Recommended Action** Configure an rsh or rcp server.

# RIP Error Message

IP Routing Information Protocol error message

## Error Message

```
%RIP-3-NOSOCKET: Unable to open socket
```

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

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

# RPS Error Messages

Redundant power supply error messages

## Error Message

```
%RPS-3-DCOUTPUTVOLTFAIL: System detected Redundant Power System DC Output Voltage failure condition
```

**Explanation** The Redundant Power System (RPS) experienced a DC output voltage failure condition in one of the power supplies.

**Recommended Action** One of the DC outputs has failed on the redundant power supply. For Cisco 3600 and Cisco 2600 redundant power supplies, the “DC Status” LED on the front of the power supply will identify which DC output has failed. For the Cisco 5300 redundant power supply, the “DC OK” LED on the front of the power supply will identify which DC output has failed. When there is a DC failure, you need to replace the redundant power supply.

## Error Message

```
%RPS-3-DCOUTPUTVOLTOK: Redundant Power System DC Output Voltage condition is now normal
```

**Explanation** The Redundant Power System (RPS) DC Output Voltage is normal.

**Recommended Action** This is an informational message only. No action is required.

## Error Message

```
%RPS-3-FANFAIL: System detected Redundant Power System FAN FAIL condition
```

**Explanation** The Redundant Power System (RPS) experienced a fan failure condition.

**Recommended Action** One of the fans has failed and you should replace the redundant power supply.

**Error Message**

%RPS-3-FANOK: Redundant Power System FAN condition is now normal

**Explanation** The Redundant Power System (RPS) fan is now normal.

**Recommended Action** The redundant power supply previously detected a fan failure condition that has been cleared.

**Error Message**

%RPS-3-INPUTVOLTFAIL: System detected Redundant Power System Input Voltage failure condition

**Explanation** The Redundant Power System (RPS) experienced an input voltage failure in one of the power supplies.

**Recommended Action** One of the AC or DC inputs has failed on the redundant power supply. For Cisco 3600 and Cisco 2600 redundant power supplies, the “AC Input” LED on the front of the power supply will identify which AC input has failed. For the Cisco 5300 AC /DC redundant power supply, the “AC OK” LED on the front of the power supply will identify which AC input has failed. For the Cisco 5300 DC/DC redundant power supply, the “DC Input” LED on the front of the power supply will identify which DC input has failed. Make sure that the AC/DC circuit in your building is operational, verify that the power cord is plugged into the redundant power supply, and make sure that the AC/DC power switch on the redundant power supply is on.

**Error Message**

%RPS-3-INPUTVOLTOK: Redundant Power System Input Voltage condition is now normal

**Explanation** The Redundant Power System (RPS) input voltage is normal.

**Recommended Action** This is an informational message only. No action is required.

**Error Message**

%RPS-3-MULTFAIL: There is more than one failure with the Redundant Power System; please resolve problems immediately

**Explanation** The Redundant Power System (RPS) experienced multiple failures. This is a critical condition.

**Recommended Action** There are multiple failures on the redundant power supply. Examine the LEDs on the front of the redundant power supply to find out which failures have occurred.

**Error Message**

%RPS-3-OVERTEMP\_OK: System temperature is now normal

**Explanation** The system is operating at a normal temperature.

**Recommended Action** The system previously detected an over temperature condition that has been cleared. This is probably caused by a high ambient temperature where the router is located.

**Error Message**

%RPS-3-OVERVOLT: Redundant Power System detected OVERVOLTAGE condition

**Explanation** The Redundant Power System (RPS) detected an overvoltage condition.

**Recommended Action** The RPS detected an over voltage condition in one of the internal power supplies. Replace the RPS unit.

**Error Message**

%RPS-3-RPSOK: Redundant Power System is now normal

**Explanation** The Redundant Power System (RPS) is operating normally.

**Recommended Action** This is an informational message only. No action is required.

**Error Message**

%RPS-3-THERMAL: System detected Redundant Power System THERMAL FAIL condition.

**Explanation** The Redundant Power System (RPS) experienced either a fan failure or an over temperature condition.

**Recommended Action** For Cisco 3600 and Cisco 2600 redundant power supplies, look at the “FAN” and “TEMP” LEDs on the front of power supply. If the “FAN” LED is amber, one of the fans has failed and you should replace the redundant power supply. If the “TEMP” LED is amber, the ambient temperature is too high. For a Cisco 5300 RPS unit, this message is displayed when the ambient temperature is too high.

**Error Message**

%RPS-3-THERMOK: Redundant Power System THERMAL condition is now normal

**Explanation** The Redundant Power System (RPS) thermal is now normal.

**Recommended Action** The redundant power supply previously detected an over temperature condition which has now cleared. This was probably caused by a high ambient temperature where the redundant power supply is located. A RPS thermal failure can also be caused by a fan failure in the redundant power supply.

**Error Message**

%RPS-3-VOLTOK: Redundant Power System VOLTAGE is now normal

**Explanation** The Redundant Power System (RPS) voltage is now normal.

**Recommended Action** The RPS previously detected an over voltage condition that has been cleared.

## RSP Error Messages

Route Switch Processor error messages

**Error Message**

%RSP-3-ACCERROR: [chars] acc [hex] had bad value [dec]

**Explanation** An incorrect value has been written on an accumulator.

**Recommended Action** Copy the error message exactly as it appears, and report it to your technical support representative. A microcode reload can correct the error condition as a workaround.

**Error Message**

%RSP-3-BADBUFHDR: [chars], address [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**

```
%RSP-2-BADCACHE: Possible cache overrun detected
End of MEMD buffer : 0x[hex]
End of datagram : 0x[hex]
bufhdr [hex]: [hex] [hex] [hex] [hex]
Flushing Cache
```

**Explanation** A packet greater than the maximum possible MTU was processed. Or, an illegal buffer header data area was found.

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

**Error Message**

%RSP-3-BADHWREV: [chars] (slot [int]) has wrong hardware revision [int].[int]

**Explanation** The hardware in the indicated slot must be upgraded for operation with the RSP.

**Recommended Action** Upgrade the board.

**Error Message**

```
%RSP-3-BADTURBOIPCMSG: Bad Turbo IPC msg ([chars]): msg=[hex] lastmsg=[hex]
hdrsize=[hex] size=[hex]
```

**Explanation** An error was discovered in an IPC message.

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

**Error Message**

%RSP-4-COOKIE: Corrupt or missing MAC address cookie using random base [sci\_notation]

**Explanation** This message indicates the part containing the MAC addresses allocated to this chassis could not be accessed or was found to be corrupt, either because of a hardware problem or manufacturing problem.

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

**Error Message**

%RSP-3-ERROR: NULL

**Explanation** This message can take many forms. It provides information about a software error.

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

**Error Message**

%RSP-3-FOREVER: cmd [int] to [chars] (slot [int]) took [int] usecs, done [hex]

**Explanation** A command from the RSP to an IP took longer than expected.

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

**Error Message**

%RSP-4-HSA\_MEM: size mismatch, master [int]MB, slave [int]MB

**Explanation** Memory size mismatch between a master and a slave RSP.

**Recommended Action** Configure both master and slave RSPs to have an equal amount of memory.

**Error Message**

%RSP-4-HSA\_MINMEM: [int]MB required for HSA

**Explanation** HSA requires a minimum of 24 MB of memory.

**Recommended Action** Upgrade your system to meet minimum memory requirements for HSA.

**Error Message**

%RSP-3-IDPROM: Bad or missing ID EEPROM, controller type [int]

**Explanation** The ID EEPROM on the RSP is missing or bad.

**Recommended Action** This message indicates a manufacturing error. Report this error to your technical support representative.

**Error Message**

```
%RSP-3-INVQPTR: queue=[hex], bufhdr [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**

```
%RSP-3-INVRTN: Invalid return queue, next=[hex], hwidb=[hex], type=[hex]
queue_ptr=[hex], bufhdr_offset=[hex], id=[dec], bcast_id=[dec] bufhdr [hex]:
[hex] [hex] [hex] [hex]
```

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

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

**Error Message**

```
%RSP-3-INVRTNBCASTID: Invalid return queue bcast_id=[dec] bufhdr [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**

```
%RSP-3-IPC: [chars] [chars]
```

**Explanation** An Interprocess Communication (IPC) error occurred. The details about what was attempted and what went wrong will be printed.

**Recommended Action** Copy the error message exactly as it appears. Copy the router's configuration along with any other relevant information. Contact your technical support representative for assistance.

**Error Message**

```
%RSP-3-IP_PANIC: Panic: [chars] [hex] [hex] [hex] [hex]
```

**Explanation** Firmware for the interface processor experienced a critical condition.

**Recommended Action** Copy the error message exactly as it appears, and report it to your technical support representative, along with the output of the **show tech-support** command.

**Error Message**

%RSP-3-LOVEGIANT: Card [chars] wants [dec] byte love letters, but only got [dec] bytes

**Explanation** An inconsistency was detected between the microcode and the system code.

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

**Error Message**

%RSP-3-LOVENOTE: [hex] corrupt: [hex] [hex] [hex] [hex]

**Explanation** This message indicates miscommunication between the RSP and an IP.

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

**Error Message**

%RSP-3-MSDOG: Master/slave watchdog timed out

**Explanation** The system software failed to reset the master/slave watchdog timer, causing it to time out. This behavior could indicate a software problem or a hardware problem.

**Recommended Action** Copy the error message exactly as it appears. Copy the router's configuration along with any other relevant information. Contact your technical support representative for assistance.

**Error Message**

%RSP-3-MSFIX: Fixing [chars] by setting to default [chars]

**Explanation** The characters shown can be either on the slave RSP setting or on the master RSP setting. The ROM monitor default slave RSP setting is not synchronized with the system configuration file specifications. During bootup, the system image detects the mismatch and modifies the ROM monitor setting to conform with these specifications. This mismatch most likely occurred because a new RSP was being installed and booted in a high system availability (HSA) environment (dual RSPs) for the first time. Alternatively, in established HSA configurations, this message may result from a previous Interprocess Communication (IPC) error occurring while the HSA environment is reconfigured.

**Recommended Action** Using the **show version** or **show boot** commands, determine which slot contains the current slave RSP. Using the **show configuration** command, determine which slot has been specified as the default slave RSP. If there is no **slave default-slot** command in the configuration file, the value defaults to the highest numbered CPU slot (slot 3 on a Cisco 7507, and slot 7 on a Cisco 7513).

If the slot number obtained in Step 1 is the same as the number obtained in Step 2, then no further action is required. You have configured HSA in simple hardware backup mode, and both RSPs are identical. However, if the two slot numbers differ, you have configured HSA in software error protection mode, and will have different images running, depending on which RSP is currently the slave RSP. If the slot numbers discovered in Steps 1 and 2 differ, reload your router to ensure that the desired system image is running. After the reload, the actual slave RSP will match the default slave RSP specified in (or inferred from) the system configuration file. For details of various HSA configuration modes consult the Cisco IOS *Configuration Fundamentals Configuration Guide*.

**Error Message**

%RSP-3-MSVERS: Master has m/s version [dec], slave has m/s version [dec]

**Explanation** The master and slave are running incompatible software versions with regard to the master/slave exchange process.

**Recommended Action** If the slave image global configuration is used to override the default slave image from the bundle, then the slave image is incompatible. Update either the master or slave image to ensure that the two are compatible. If the slave is running the image from the bundle, execute and record the output of the following commands:

- show version
- show running-config
- show controller cbus

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

**Error Message**

%RSP-3-NOIDB: bad vc [int] on [chars]

**Explanation** A channelized interface driver received a packet on an unconfigured channel.

**Recommended Action** Copy the error message exactly as it appears, and report it to your technical support representative, along with the output of the **show tech-support** command.

**Error Message**

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

**Explanation** No MAC address was available for allocation to the specified interface.

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

**Error Message**

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

**Explanation** An attempt at memory allocation failed.

**Recommended Action** To remedy the problem, add memory, disable some features, or apply filtering to decrease the size of system data structures (the routing table, for example). In general, reduce other system activities to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

**Error Message**

%RSP-3-NORESTART: [chars]: unable to schedule restart for output queue

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

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

**Error Message**

%RSP-3-NOSTART: No microcode for [chars] card, slot [int]

**Explanation** No microcode is defined or available for the specified card.

**Recommended Action** Reconfigure the card to specify an existing microcode file.

**Error Message**

%RSP-2-QADIAG: QA Diagnostic [chars] error at [hex]

**Explanation** An error occurred while accessing RSP internal hardware.

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

**Error Message**

%RSP-2-QAERROR: [chars] error, [chars] at addr [hex] ([chars]) log [hex], data [hex] [hex]

**Explanation** A software error was detected during packet switching.

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

**Error Message**

%RSP-3-RESTART: NULL

**Explanation** The cBus buffer memory was reset and reallocated.

**Recommended Action** Report this error to your technical support representative, if memory is not reset manually (by changing the MTU on an interface, for example).

**Error Message**

%RSP-4-RSPDRAM: Insufficient DRAM to adequately run this IOS version. [dec]M is recommended

**Explanation** The quantity of RSP DRAM is below the recommended amount.

**Recommended Action** Add DRAM.

**Error Message**

%RSP-3-SLAVECHANGE: Slave changed state from [chars] to [chars]

**Explanation** The slave RSP has undergone a hardware state change. Both the old state and new states are shown. Possible states are nonparticipant, slave, master, and unplugged. Possible state changes indicated by this message are any to unplugged, unplugged to nonparticipant, nonparticipant to slave or slave to nonparticipant. Any other combination is unexpected.

**Recommended Action** The following actions are recommended:

- If the slave RSP has been removed, consider reinstalling it if continued high system availability (HSA) operation is required. If the slave RSP is present, ensure that it is properly seated in the card cage.
- If a slave RSP has been installed, configure the router for HSA. See the *Configuration Fundamentals Configuration Guide* for more details. In particular, use the **slave auto-sync config** command to ensure that the new slave RSP is configured consistently with the current master RSP.

**Caution**

Failure to ensure a consistent configuration on a freshly installed slave RSP might result in undefined behavior if the router reloads.

- If a previously crashed slave RSP has been reset, or a newly installed slave RSP is in transition from unplugged to nonparticipant, and finally to slave state. No action is required.
- If the slave RSP image has crashed, log in to the slave RSP's console using the **if-console slot** command. You will now be connected to the ROM monitor prompt on the slave RSP. Diagnose the slave RSP failure. For example, capture the output from the stack and context ROM monitor commands. Provide that information to your technical support representative, along with the router's configuration and any other relevant information, so that the problem can be investigated. Log out from the slave RSP's console port using Ctrl-C or Ctrl-Z, and enter the **slave reload** global configuration command on the master RSP to bring the slave RSP back online.
- All other state changes indicate a software or hardware error. Provide the router's configuration and any other relevant information to customer support so that the problem can be investigated.

**Error Message**

```
%RSP-3-SLAVEMASTER: Slave stole mastership
```

**Explanation** The master RSP detected that the slave RSP had taken mastership of the router. The old master RSP will reload and become the slave RSP, letting the new master RSP take over. This behavior indicates a software or hardware error.

**Recommended Action** Copy the error message exactly as it appears. Copy down the router's configuration along with any other relevant information. Contact your technical support representative for assistance.

**Error Message**

```
%RSP-3-SLAVE_NVRAM_BUSY: Slave NVRAM is temporarily busy
```

**Explanation** Another process is temporarily locking the slave config.

**Recommended Action** Retry the command that caused the error message. If the error message recurs, check for other execs via the **show users** command. If you know that there are no other users locking the slave NVRAM, then contact your technical support representative for assistance.

**Error Message**

%RSP-5-SLAVEUP: Slave changed to state Running

**Explanation** This is an informational message to indicate that the slave RSP has started running the slave RSP image. This message appears after the router boots or after the **slave reload** global configuration command is issued on the master RSP.

**Recommended Action** No action is required.

**Error Message**

%RSP-2-STALL: partially inserted or removed IPs on cyBus[int]

**Explanation** Most likely, a board is not fully seated in the chassis. A less likely possibility is a hardware problem with the RSP or backplane.

**Recommended Action** Try reseating the boards. Call your technical support representative for assistance if this message persists.

**Error Message**

%RSP-3-XBUFHDR: corrupt bufhdr [hex]: [hex] [hex] [hex] [hex]

**Explanation** Miscommunication occurred between the RSP and an IP.

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

## RSRB Error Messages

Remote source-route bridging error messages

**Error Message**

%RSRB-4-BADLEN: Peer [chars], [chars], bad length [dec], trn [dec]

**Explanation** An internal software error occurred.

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

**Error Message**

%RSRB-4-BADLENIP: Peer [dec]/[int], [chars], bad length [dec], trn [dec]

**Explanation** An internal software error occurred.

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

**Error Message**

%RSRB-3-BADVERSIONFST: FSTin: [chars]: version mismatch, mine [dec], theirs [dec]

**Explanation** The remote end of a direct serial peer is running the wrong version of the system software. Either the local end, the remote end, or both are not up-to-date.

**Recommended Action** Call your technical support representative for an update.

**Error Message**

%RSRB-3-BADVERSIONIF: IFin: [chars]: version mismatch, mine [dec], theirs [dec]

**Explanation** The remote end of a direct serial peer is running the wrong version of the system software. Either the local end, the remote end, or both are not up-to-date.

**Recommended Action** Call your technical support representative for an update.

**Error Message**

%RSRB-3-BADVERSIONTCP: [chars]: [dec]/[int]: version mismatch, mine [dec], theirs [dec]

**Explanation** The remote end of a TCP remote peer is running the wrong version of the system software. Either the local end, the remote end, or both are not up-to-date.

**Recommended Action** Call your technical support representative for an update.

**Error Message**

%RSRB-4-BADVRE: Bad vre type

**Explanation** An internal software error occurred.

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

**Error Message**

%RSRB-4-CONIPST: Peer [dec]/[int], CONN, illegal state [dec]

**Explanation** An internal software error occurred.

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

**Error Message**

%RSRB-4-CONNILLSTATE: Peer [chars], CONN, illegal state [dec]

**Explanation** An internal software error occurred.

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

**Error Message**

%RSRB-4-CONNSTAT: Peer [chars], IFin, bad connection state [dec]

**Explanation** An internal software error occurred.

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

**Error Message**

%RSRB-3-FSTERR: [chars]: [chars]: [int], op [hex], len [dec], trn [dec]

**Explanation** The remote end of a direct serial RSRB connection detected a configuration problem or traffic that is not recognized by the configuration.

**Recommended Action** Examine the configuration on both sides of the serial connection for possible problems. Examine the traffic being offered for propagation with respect to the configuration. The destination target ring is denoted by the value of *trn*.

**Error Message**

%RSRB-3-HDRNOVRP: Peer [int], HDR, no vrp

**Explanation** An internal software error occurred.

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

**Error Message**

%RSRB-4-HDRRECV: Peer [dec]/[int], HDR, recv state invalid, not empty [dec]

**Explanation** An internal software error occurred.

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

**Error Message**

%RSRB-3-HDRVPR: Peer [dec]/[int], HDR, vrp state wrong, [dec]

**Explanation** An internal software error occurred.

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

**Error Message**

%RSRB-3-IFERR: [chars]: [chars]: [chars], op [hex], len [dec], trn [dec]

**Explanation** The remote end of a direct serial RSRB connection detected a configuration problem or traffic that is not recognized by the configuration.

**Recommended Action** Examine the configuration on both sides of the serial connection for possible problems. Examine the traffic being offered for propagation with respect to the configuration. The destination target ring is denoted by the value of *trn*.

**Error Message**

%RSRB-4-ILLPEER: Peer [chars] [[hex]], illegal state [dec]

**Explanation** An internal software error occurred.

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

**Error Message**

%RSRB-4-LOCAL: Unit [dec], local/vring set simultaneously, vrn [dec]

**Explanation** An internal software error occurred.

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

**Error Message**

%RSRB-3-NOMEMORY: Unit [dec], no memory for [chars]

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

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

**Error Message**

%RSRB-3-NOTREM: Null idb and not remote

**Explanation** An internal software error occurred.

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

**Error Message**

%RSRB-4-OPTNULL: Remopened and t NULL

**Explanation** An internal software error occurred.

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

**Error Message**

%RSRB-4-PEERSTAT: Peer [chars], wrong state [dec]

**Explanation** An internal software error occurred.

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

**Error Message**

%RSRB-4-RNGXFAIL: Ring exchange failure, resetting peer: [chars]

**Explanation** The RSRB peer initiation logic failed because of a memory shortage or congestion condition.

**Recommended Action** The problem should clear and the peers should re-open without operator intervention.

**Error Message**

%RSRB-3-SENDPUNTFST: [chars]: sent [chars] to [chars]

**Explanation** The local end of a direct serial RSRB connection detected a configuration problem or traffic that is not recognized by the configuration.

**Recommended Action** Examine the configuration on both sides of the serial connection for possible problems. Examine the traffic being offered for propagation with respect to the configuration.

**Error Message**

%RSRB-3-SENDPUNTIF: [chars]: sent [chars] to [chars]

**Explanation** The local end of a direct serial RSRB connection detected a configuration problem or traffic that is not recognized by the configuration.

**Recommended Action** Examine the configuration on both sides of the serial connection for possible problems. Examine the traffic being offered for propagation with respect to the configuration.

## RTT Error Messages

Round trip time monitor error messages

**Error Message**

%RTT-3-BadLoc: %RTR: should not have reached rttmon\_config\_entry\_command

**Explanation** An internal software error 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**

%RTT-3-BufferInitFailed: RTR: Initialization of buffers failed!

**Explanation** The Round Trip Time Monitor (RTTMON) process could not be started because of a low-memory condition.

**Recommended Action** Reduce usage of resources in the configuration to resolve the memory shortage. Once the memory shortage is resolved in the configuration, the system will need to be rebooted because this error occurred during system initialization. Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

**Error Message**

%RTT-3-GlobalInitFailed: RTR 0: [chars] - Failed to initialize local storage

**Explanation** The Round Trip Time Monitor (RTTMON) process could not be started because of a low-memory condition.

**Recommended Action** Reduce usage of resources in the configuration to resolve the memory shortage. Once the memory shortage is resolved in the configuration, the system will need to be rebooted because this error occurred during system initialization. Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

**Error Message**

%RTT-3-MissingEchoStruct: %%RTR: failed to get EchoAdmin Struct

**Explanation** An internal software error 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**

%RTT-3-MissingInit: %%RTR: required initialization failed, thus cannot configure

**Explanation** Configuration of the Round Trip Time Monitor (RTTMON) failed because of the previously-reported memory shortage.

**Recommended Action** Reduce usage of resources in the configuration to resolve the memory shortage.

**Error Message**

%RTT-3-SemaphoreInitFailed: RTR: Initialization of rttMonConfigSemaphore failed!

**Explanation** The Round Trip Time Monitor (RTTMON) process could not be started because of a low-memory condition.

**Recommended Action** Reduce usage of resources in the configuration to resolve the memory shortage. Once the memory shortage is resolved in the configuration, the system will need to be rebooted because this error occurred during system initialization. Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.